

## E-VAT: An Electronically Collected Progressive Consumption Tax

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This report proposes replacing the income tax with an electronic, progressive consumption tax that couples a credit-method VAT (modified for wages) with a progressive wage tax. I have called this proposal e-VAT (a convenient contraction for an electronic value added tax), because it is based on a business-level credit VAT and can be collected automatically and electronically at the point of sale.

The essential advantage of e-VAT over the Hall-Rabushka flat tax is that e-VAT's use of a credit VAT as its foundation facilitates automatic and electronic collection of the tax. A credit VAT lends itself to electronic monitoring and auditing by the IRS. In contrast, the Hall-Rabushka flat tax uses a subtraction-method VAT and therefore would require annual collection, mirroring it in 20th century technology. The e-VAT would avoid annual collection, a manual and time-consuming audit process, and reliance on self-reporting by taxpayers, all failings that the flat tax would share with the current income tax.

The report provides an explanation of how the e-VAT system would operate, achieve progressivity, and deal with the problems that currently plague the income tax system like systemic tax cheating and the resulting tax gap. Electronic assessment and collection in an economy like ours in which most significant transactions are done electronically allow for easy compliance and monitoring by the IRS.

The report also explains how e-VAT would allow for an estate tax that is free from the complaint of the

estate tax's current critics — that it represents a second tax on saved income and is therefore unfair. Under e-VAT, the estate tax would be the only tax on saved income.

In addition, e-VAT is destination based and would be consistent with the taxing method used in virtually the entire industrialized world. As such, it would eliminate the competitive price disadvantage that U.S. exports have compared with VAT-collecting jurisdictions' manufactured goods. This competitive disadvantage results from the fact that U.S. goods incur, and therefore absorb and include in their prices, the U.S. corporate income tax imposed on the U.S. producers, as well as the VAT owed when the importer sells the U.S. goods in those VAT destinations. Under destination-based e-VAT, as a replacement for the corporate tax, U.S. export goods would not have to include in their prices a U.S. corporate tax on top of the destination-based foreign VAT.

This report is a portion of a book by the author that critically examines the current income tax system. The book describes the shortcomings of the income tax and suggests a consumption tax as a replacement for it. The book then provides background regarding the single-tier alternative consumption taxes that can be assessed and collected at the individual and business levels and observes that the current income tax contains provisions from several of these consumption tax methods, so that a shift to a consumption tax would not be as revolutionary regarding burden-sharing as might appear. The book concludes with the material in this report, proposing e-VAT.

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**I. Introduction to a Two-Tier Consumption Tax**

In general, a consumption tax can be structured using alternative forms. The forms that are generally discussed as replacements for the income tax are consumed income tax, yield exemption tax, business-level retail sales tax, business-level credit VAT, and business-level subtraction VAT.

The consumed income tax and yield exemption tax foresee the collection of tax annually from individuals based on income or receipts and thus appear closely related to the current income tax. These methods impose the tax on individuals by requiring them to pay tax when they earn income or spend previously accumulated earnings. In figures 1(a) and (b), this tax would be imposed at point 1.

The other three forms of consumption tax — retail sales tax, credit VAT, and subtraction-method VAT — collect tax at the business level. These methods impose the tax on sellers. The tax is thereby added to the buyer’s cost of the product or service purchased, either as an express add-on, like a typical state retail sales tax, or as a component of the producer’s costs, like the VATs. In figures 1(a) and (b), this tax would be imposed at point 2 (or possibly points 3 or 4 in Figure 1(b)).

Figure 1(a) is a schematic that depicts the flow of funds in a simplified economy, without Government (G), Taxes (T), Imports (IM), or Exports (X). It thus presents the equivalency of National Income (Y) and Consumption (C) plus Investment (I). Points 1 and 2 in Figure 1(a) represent alternative points to collect taxes. Point 1 depicts the collection of tax from individuals, who are both wage earners and owners of capital and thus are entitled to wages and returns on capital like interest and profits. Point 2 depicts the collection of tax from businesses, which receive Consumption (C) and Investment (I) expenditures from customers. The figure is based on the following equivalency: C+I=Y.

Figure 1(b) adds to the graphic Government, Taxes and Transfer Payments, and Imports and Exports. Points 1 and 2 nevertheless remain at the same places, indicating the alternative points in the cycle where taxes could be collected. Points 3 and 4 are also possible tax collection

points, depending on whether government purchases are subjected to tax and whether the tax excludes exports but includes imports.

The concept of a two-tier variation of a VAT involves imposing some of the tax at both points in figures 1(a) and (b). Importantly, all of the methods of taxation identified above tax personal consumption. However, these methods differ regarding where they impose the “legal incidence” of the tax.

Before this report progresses any further, I should explain what constitutes “legal incidence” and “economic incidence” of tax. An example will help explain how these terms apply in the context of a simple sales tax. If the federal government were to decide to impose a \$0.60 per gallon tax on gasoline, it could do so in two ways.<sup>1</sup> First, the federal government could impose that tax on the gasoline seller so that for each gallon of gasoline sold, the seller is liable for the \$0.60 tax.<sup>2</sup> To a casual observer, it would appear that the seller bears the burden of that tax, because the seller has the legal obligation to pay the tax. One would thus say that the legal incidence of the tax is on the seller.<sup>3</sup>

Alternatively, the federal government could impose the statutory burden of the tax on the gasoline buyer by requiring the buyer to pay an additional \$0.60 for each gallon of gasoline purchased.<sup>4</sup> Under this scenario, a casual observer would view the buyer as bearing the burden of the tax, because the buyer has the legal obligation to pay the tax. One would thus say that the legal incidence of the tax is on the buyer.<sup>5</sup>

However, in fact, both of these situations are economically equivalent,<sup>6</sup> because \$0.60 is paid to the government on each gallon of gasoline sold. How the actual economic burden of the tax is shared between the buyer and the seller under either of these situations cannot be determined without analyzing the effect of the tax on the price of the gasoline.

Assume that the seller has the legal responsibility to pay the tax. If the price of gasoline increases by the same \$0.60 for which the seller is legally liable on the sale of a gallon of gasoline, one can conclude that the buyer bears the economic burden of the tax.<sup>7</sup> One would say that the economic incidence of the tax falls on the buyer. In contrast, if the price to the buyer remains the same because the seller absorbs the entire tax without increasing the price, one can conclude that the economic incidence of the tax falls entirely on the seller.<sup>8</sup> However, if the seller could pass only a portion of the tax to the buyer, the economic incidence of the tax would be shared by the

<sup>1</sup>See Harvey S. Rosen, *Public Finance* 260-263 (5th ed. 1999); Hal R. Varian, *Intermediate Microeconomics* 289-291 (4th ed. 1996).

<sup>2</sup>See Rosen, *supra* note 1, at 262 (illustrating legal incidence of tax on seller).

<sup>3</sup>*Id.*

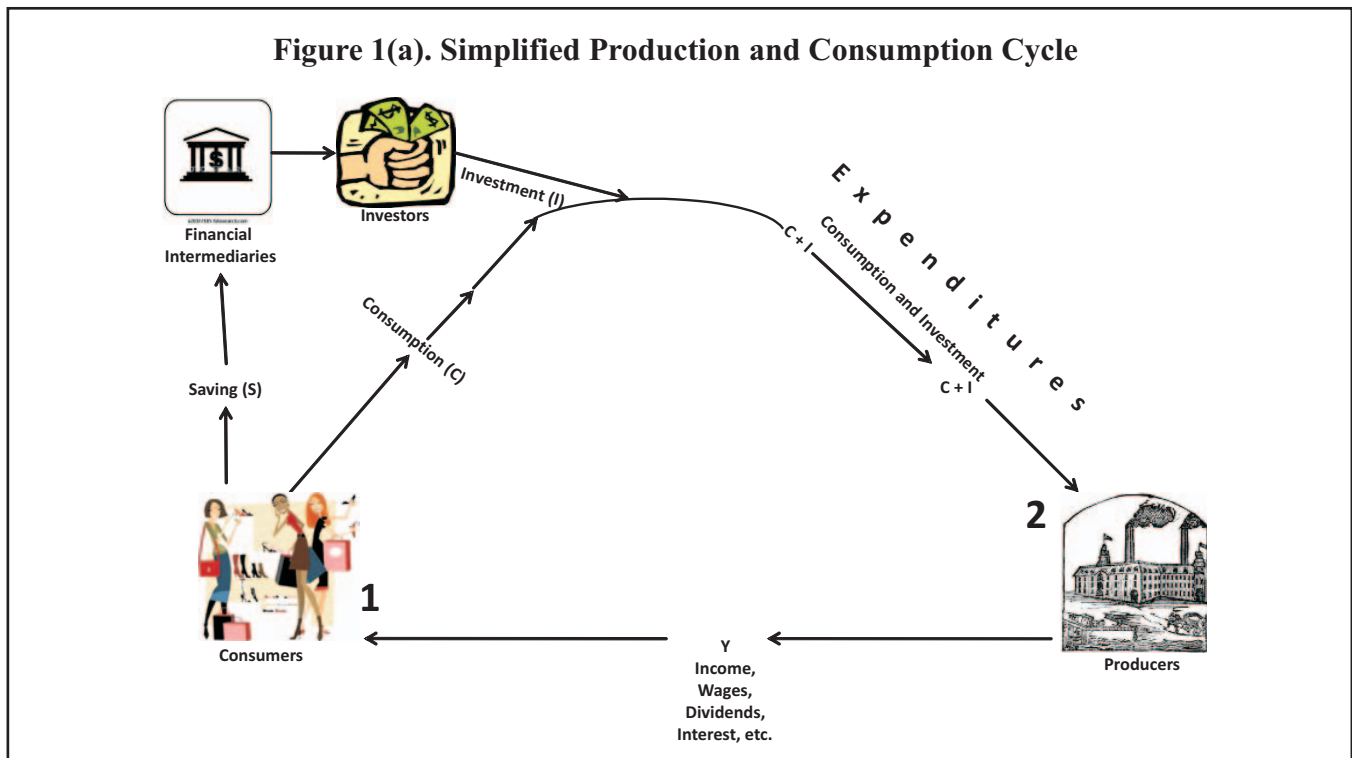
<sup>4</sup>*Id.* at 260 (illustrating legal incidence of tax on buyer).

<sup>5</sup>See Varian, *supra* note 1, at 290-291.

<sup>6</sup>*Id.* at 289-291 (demonstrating mathematically this equivalency); see also Rosen, *supra* note 1, at 260-263.

<sup>7</sup>See Varian, *supra* note 1, at 290.

<sup>8</sup>*Id.*



buyer and the seller, even though the legal incidence is imposed entirely on the seller.<sup>9</sup>

A similar analysis can be used if the legal incidence of the tax is imposed only on the buyer.<sup>10</sup> The results regarding the distribution of the burden between the buyer and the seller will be identical.<sup>11</sup> Because the legal incidence of a tax does not determine its economic incidence, the tax is more properly described as imposed on transactions rather than on the buyer or the seller. Thus, in analyzing the distributional effect of a tax, one must look past the legal incidence of the tax to the economic incidence.<sup>12</sup> One cannot determine the amount of tax shifting that will occur a priori, that is, without understanding how the markets will establish the total price — including the tax — of each gallon of gasoline.<sup>13</sup> Because this example involved a single rate tax in a sales transaction, legal incidence did not affect economic incidence.

However, legal incidence is not always irrelevant. For example, a tax on business may be easier to collect than a tax on individuals, so the legal incidence of the sales tax in the example should be imposed on the business taxpayers who may or may not be able to pass it along to buyers. It would be a nightmare to depend on buyers to pay the tax voluntarily.

Also, legal incidence of a tax can make a difference if the tax allows rates to vary among taxpayers and thereby

determines the distribution of tax burdens. For example, if tax rates vary between sellers and individual consumers, imposing a tax on consumers rather than sellers is likely to affect the aggregate amount of tax collected. Similarly, if tax rates vary among individual consumers, taxing only consumers will distribute the tax burdens among them in proportion to their respective tax rates. In contrast, imposing the tax only on sellers would affect all individual consumers in the same amount, having the effect of a flat tax rate on consumers. Consequently, the choice of the legal incidence of a tax on consumption could affect burden sharing, consumer choices, and other resource allocations in the economy.

Under the consumed income and yield exemption taxes, the individual taxpayer is legally responsible for paying the tax. Progressivity can thus be built into the tax rates and thereby affect the economic incidence of the tax and the burden sharing among individual taxpayers. Under the business-level consumption tax — which includes the retail sales tax, credit VAT, and subtraction-method VAT — the sellers of goods and services have the legal responsibility to pay the tax. For individual consumers, this would translate to a flat rate tax on consumption expenditures, because sellers will charge the same price to all individual consumers and the tax will affect those consumers by the same amount.

This discussion demonstrates that graduated rates can most easily be accomplished by imposing the consumption tax on individuals, as is done under the consumed income and yield exemption models. However, these methods also lend themselves to additional personalization, such as allowing deductions for charitable contributions, home mortgage interest, and the myriad of other personal and tax expenditure deductions allowable under the current income tax. This would not necessarily be

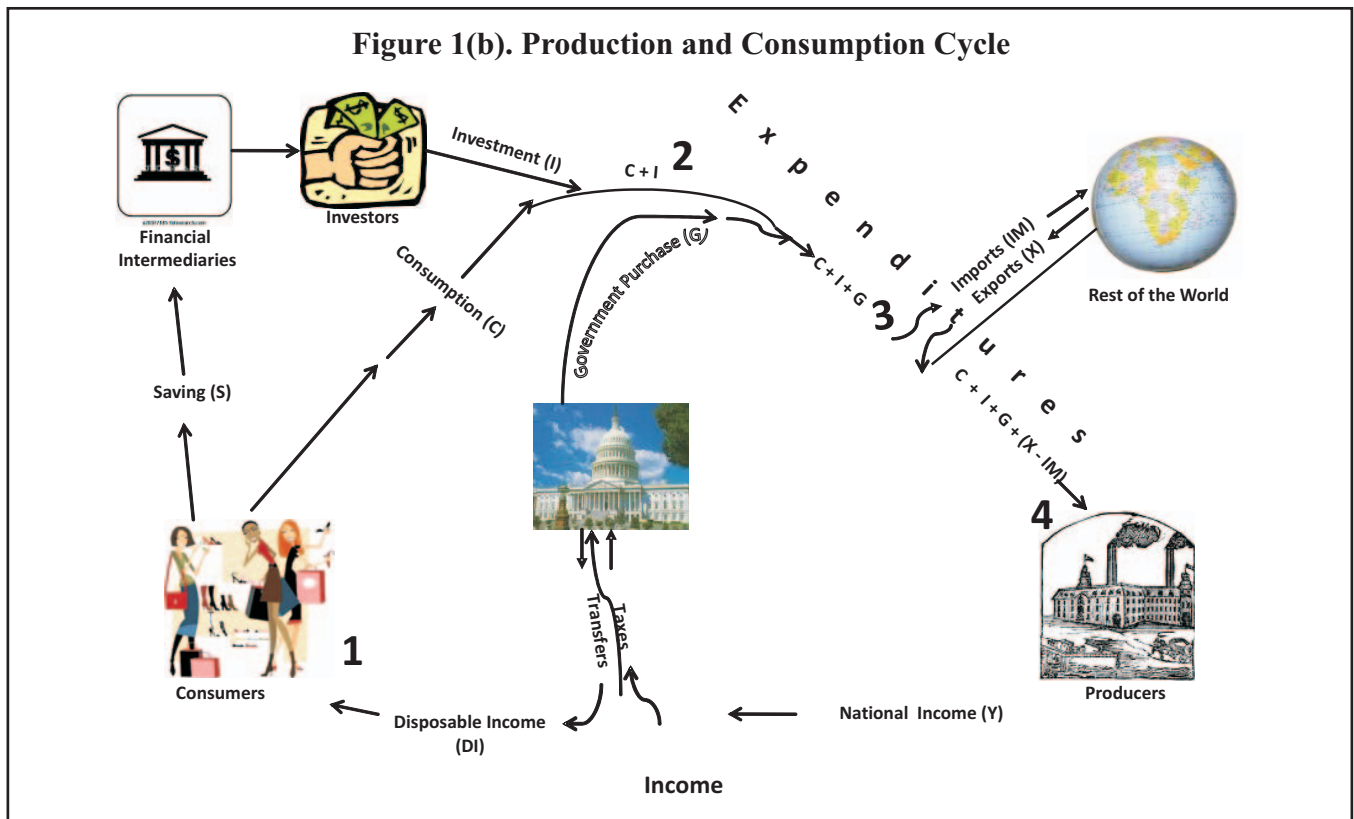
<sup>9</sup>*Id.* at 298-295.

<sup>10</sup>*Id.* at 290.

<sup>11</sup>*Id.*

<sup>12</sup>*Id.* at 293-295.

<sup>13</sup>See Rosen, *supra* note 1, at 263-265.



a good thing. Indeed, the potential for overpersonalization may cause one to favor one of the business VAT forms. Even though business-level taxes are largely free from personalization at the individual level, they are not readily adaptable to progressivity. Progressivity in the tax system is a likely sine qua non to congressional acceptance.

There is one important caveat to the foregoing assertion that progressivity cannot easily be incorporated into business-level tax systems. Although VATs preclude progressivity at the individual consumer level as a practical matter as well as many of the other personalization features, VATs can indirectly affect the tax burden-sharing among economic classes of individuals by using different tax rates for different goods and services. Lower tax rates could be imposed on staples in comparison with luxury items. European countries, for example, impose different VAT rates on different products, adding substantial complexity to the European business VATs. Taxes imposed directly on consumers do not lend themselves to this type of product differentiation.

#### A. E-VAT — a Two-Tier Consumption Tax

The features of an individual-level tax and a business-level tax can be combined into a two-tier consumption tax. Robert Hall and Alvin Rabushka recognized this possibility and acknowledged the significance of legal incidence. They devised a two-tier consumption tax system, discussed in their groundbreaking book *The Flat Tax*. The Hall-Rabushka flat tax is a two-tier variation of the subtraction-method VAT, under which the business-level portion of the tax allows a deduction for wages as if they were purchases of materials and the wages are taxed

separately to the wage earners.<sup>14</sup> Thus, under the Hall-Rabushka flat tax, the legal incidence is divided, with sellers bearing legal responsibility for the entire business level tax, excluding the portion of the tax attributable to wages. The proposal leaves the wage earners to bear the legal incidence of the wage portion of the tax. However, the tax base under the flat tax is the same as under a VAT. Also, the economic incidence of the flat tax would be the same as the economic incidence of all of the forms of VAT, assuming that the tax rates imposed on the wage portion of the flat tax were the same as the tax rate imposed on the nonwage portion of the flat tax. Thus, as long as all tax rates are uniform and the wage tax portion is unadulterated with special tax rates, exemptions, or deductions, the two-tier legal incidence of the flat tax will not affect its economic incidence — that is, it will not affect who actually bears the economic burden of the tax through reduced wealth.

The Hall-Rabushka flat tax proposal sought to tax wages at the same rate as the business portion VAT rate. It was this idea of a single tax rate applicable to both businesses and wage earners and a tax without graduated rates that garnered the publicity regarding the proposal. The publicity and reaction to the single or “flat” rate of the proposal eclipsed its brilliant advance in thinking: Namely, that one could divide the legal incidence of tax between businesses and wage earners to

<sup>14</sup>Robert E. Hall and Alvin Rabushka, *The Flat Tax* 62 (2d ed. 1995).



achieve the benefits of a business-level tax with a modicum of personalization at the wage earner level.

Hall and Rabushka proposed that the wage portion of their tax should use a flat rate equal to the VAT rate, with a limited zero bracket amount and limited individual deductions.<sup>15</sup> They have expressed regret, however, regarding their decision to call their proposal “The Flat Tax,” admitting that the name is flawed because the “flat tax” part of the label hides its most important attribute — that the proposal is a consumption tax.

The Hall-Rabushka flat tax could be modified. In point of fact, the tax rates at the business level and at the individual level need not be the same. Rather, under the two-tier structure, wage earners could be taxed on those wages at graduated or flat rates, with or without a zero bracket amount, personal exemptions, and personal deductions.<sup>16</sup>

David Bradford built on the Hall-Rabushka two-tier concept, proposing a two-tier variation of the business-level subtraction-method VAT, which he called the “X-Tax.”<sup>17</sup> The X-Tax did not suffer from the naming problem associated with the flat tax because, unlike the words “flat tax,” X-Tax has no apparent independent meaning. Bradford’s proposed tax consists of a modified subtraction-method VAT on the business side in which wages are allowed as deductions and the remaining base is taxed at a single rate, coupled with a graduated-rate wage tax on the individual side in which the top tax rate is set at the VAT rate.<sup>18</sup> Most recently, Bradford suggested that the compensation tax component should depart from a wage tax and instead should take the form of a cash flow consumed income tax.<sup>19</sup>

Both the flat tax and the X-Tax have the drawback of being based on a subtraction-method VAT. However, these proposals represent advances in thinking that lead one to consider yet another variation of a two-tier consumption tax.

This report proposes coupling a credit VAT with a progressive wage tax. I have called this proposal “e-VAT,” because it is based on a business-level credit VAT and can be collected automatically and electronically at the point of sale.<sup>20</sup> The essential advantage of e-VAT over the flat tax is that e-VAT’s use of the credit VAT facilitates

automatic and electronic collection of the tax.<sup>21</sup> In contrast, because the flat tax uses a subtraction-method VAT, it would require annual collection, mirroring it in 20th-century technology. Moreover, e-VAT also lends itself to electronic monitoring and, as a two-tier tax, can be made progressive. Section II of this report discusses e-VAT in detail and proposes it as the successor to the income tax.

An example will demonstrate how these two-tier consumption tax proposals collect the same tax as the business-level VATs, which impose the tax on seller-producers exclusively. The one difference is that these two-tier taxes separate out the portion of the tax attributable to wages and then impose that portion on the wage earner. Thus, the legal incidence of the two-tier consumption tax is divided between sellers and wage earners.

This difference can be understood best by comparing a subtraction-method VAT with the flat tax and e-VAT using the example of manufacturer Manny, retailer Roy, wage earner Winifred, and a tax-inclusive VAT rate of 20 percent. Under the flat tax, Manny would include sales proceeds of \$70 in his tax base but would be taxed only on \$60, because he would be allowed a deduction for the \$10 of wages paid to Winifred. Manny would thus be liable for \$12 of tax instead of the \$14 that he would owe under a subtraction-method VAT. However, unlike the regular subtraction-method VAT, Winifred would be subject to tax on her wages. If the wage tax were set at a flat 20 percent, Winifred would be liable for tax of \$2. Retailer Roy would pay tax of \$6 on a tax base of \$100 less \$70 and would be unaffected by this nuance, because he did not pay any wages. Thus, the total tax under both a subtraction-method VAT and the two-tier flat tax would be \$20: (\$14 + \$6) under the subtraction-method VAT, and (\$12 + \$2 + \$6) under the flat tax, as presented in Table 1.

By shifting to Winifred the legal incidence of the tax on the wage portion of the value added, the tax on her can be made more flexible. A zero tax rate can be built into the wage tax schedule, and personal exemption and tax expenditure deductions can be allowed in computing Winifred’s taxable wage base.

The e-VAT is a two-tier tax like the flat tax. Similar to the flat tax, the e-VAT separates out wages and taxes employees on those wages under a wage tax while eliminating wages from the credit VAT base. Thus, Winifred, as under the flat tax, would be subject to a wage tax of \$2 (\$10 × 20 percent). Unlike the flat tax, however, the e-VAT employs a credit-invoice VAT instead of a subtraction-method VAT to tax businesses. Consequently, in the example, under the credit VAT portion of the e-VAT (in its most basic form), Manny would pay a VAT of \$14 (\$70 × 20 percent) as the first part of the computation. Manny would then be allowed a credit for the wages paid multiplied by the VAT rate, which would compute to a credit of \$2 (\$10 × 20 percent); this would be the amount of wage tax imposed on Winifred. As explained before, if the wage tax were imposed at a flat 20 percent, the \$2 credit would equal the amount that Winifred would pay in wage tax, thereby preserving the central

<sup>15</sup>*Id.*

<sup>16</sup>*Id.* at 58-59.

<sup>17</sup>David Bradford, “Blueprint for Fundamental Tax Reform,” 26 *Brooklyn J. Int’l L.* 1449 (2001).

<sup>18</sup>David Bradford wrote extensively about this proposal, most recently in Bradford, “A System for the Twenty-First Century,” in *Toward Fundamental Tax Reform* 11, 13-29 (2005). This was his last writing before his untimely death.

<sup>19</sup>*Id.* Under Bradford’s most recent modification, the X-Tax could capture the receipt of a worker’s qualified retirement savings in the individual’s tax base without having to view it as a type of deferred wages, which would be the case if the compensation tax component took the form of a wage tax under which investment returns were excluded from the tax base.

<sup>20</sup>See Daniel S. Goldberg, “E Tax: The Flat Tax as an Electronic Credit VAT,” *Tax Notes*, Sept. 5, 2005, p. 1168, *Doc 2005-17667*, or 2005 *TNT* 172-21.

<sup>21</sup>*Id.*

Taxpayer	Subtraction VAT	Flat Tax	Retail Sales Tax	Credit VAT	E-VAT
Manufacturer Manny	14	12	0	14	12
Retailer Roy	6	6	20	6	6
Employee/Wage Earner Winifred	0	2	0	0	2
Total Tax	20	20	20	20	20

feature of the VAT. Again, Roy would continue to pay \$6, unaffected by this nuance. Thus, as outlined in Table 1, a total tax under the e-VAT of \$20 would be paid.

The table above provides a comparison among the two styles of two-tier consumption taxes discussed in this section and the three forms of business-level consumption taxes.

These two-tier consumption taxes should not be confused with a hybrid income-consumption tax just because the legal incidence of the tax is partly on wages, which for individual taxpayers is a component of income. The flat tax, X-Tax, and e-VAT are every bit consumption taxes, augmented with some algebraic magic. They start with a business-level consumption tax and subtract wages, which are simply taxed in the hands of wage earners. Wage earners would be expected to be paid sufficiently higher wages than under a pure business-level consumption tax in order to compensate them for bearing the legal incidence of the wage portion of the consumption tax.

The closest to an official pronouncement of a two-tier tax proposal was the growth and investment tax (GIT) by President George W. Bush's Advisory Panel on Federal Tax Reform. The GIT was the latest version of a modified consumption tax that emerged as a result of a Treasury-sponsored advisory panel analysis of a quasi-consumption tax that was believed to be politically sellable. Working with that constraint, the tax reform panel issued in November 2005 what it termed a "simple, fair, and pro-growth" set of "proposals to fix America's tax system." This is somewhat of an exaggeration, I would say, at the risk of understatement. Bush's proposal combined a subtraction-method VAT at the business level with a mix of Bradford's X-Tax and modest tax on investment earnings at the individual level. It also contained a substantial amount of detail within the proposals to make it more than a mere blueprint for reform. Rather, it was an actual implementable proposal ready for serious consideration by Treasury and Congress, although the proposal never really received this consideration.

Importantly, the panel declined to propose a pure consumption tax successor to the income tax. The panel was not even empowered to consider a system based on a credit VAT, which was deemed unacceptable from the get-go and was taken off the table immediately. Hamstrung in this way, along with other compromises deemed politically necessary, the panel's product was criticized for seeking to replace the mess of the current income tax with a newly created mess. That criticism made any expenditure of effort to try to enact the proposal not likely to be productive or worthwhile.

## B. Summary and Observations

Among the various methods of implementing a consumption tax, which one should be chosen? That depends on how important some tax aspects are to the chooser. If an easily understandable shift from an income tax were desired and graduated rates were essential, the consumed income or yield exemption models work best. If reducing administrative costs of the tax were most important, a credit VAT point-of-sale system would work best. E-VAT, the system proposed in this report, would accomplish both of those objectives.

## II. E-VAT: Electronic, Progressive Consumption Tax

### A. Introduction

More than 35 years of experience with the income tax has taught me that the income tax is structurally flawed and needlessly complicated, contains perverse incentives against saving and investment, fails to use modern technology to ease compliance and collection burdens, and is subject to congressional micromanaging.<sup>22</sup> These problems, in turn, lead to noncompliance with the income tax and to large costs required to run the tax system.

Substantial consideration (not reproduced in this article) has caused me to believe that the solution to these problems is the adoption of a consumption tax. Replacing the current income tax with a consumption tax would not be nearly as dramatic a leap as is generally assumed, because the current income tax is actually a hybrid income-consumption tax.<sup>23</sup>

This section describes the best replacement for the income tax among the consumption tax alternatives: e-VAT.

E-VAT is the best choice for a replacement consumption tax because it combines straightforward concepts with appropriate use of technology to achieve ease, efficiency, and certainty of compliance and collection. Yet to individual taxpayers, it appears to be a simplified version of the current income tax, making it relatively painless to accept. Further, because it is progressive, it allows for flexibility to achieve desired burden-sharing without the perverse incentives against saving and investment inherent in the income tax. Does that sound good? Let's take a look at it.

E-VAT is a two-tier progressive consumption tax that is based on a credit-method VAT. It is based on, but

<sup>22</sup>This section is based on Goldberg, *supra* note 20, and Goldberg, "E-Tax: Fundamental Tax Reform and the Transition to a Currency-Free Economy," 20 *Va. Tax Rev.* 1-74 (2000).

<sup>23</sup>See Goldberg, "The U.S. Consumption Tax: Evolution, Not Revolution," 57 *Tax Law.* 1 (2003).

represents an advance over, the flat tax, which was originally proposed by Hall and Rabushka in 1985 and is a two-tier consumption tax based on a subtraction-method VAT.<sup>24</sup> The nuance contained in both e-VAT and the flat tax is the treatment of wages.<sup>25</sup>

E-VAT treats wages as if they were a purchase of a service from another business firm. Thus, e-VAT allows a credit for the VAT paid on those wages. A simple credit-method VAT, in contrast, does not allow a credit with regard to wages. Similarly, the flat tax allows a deduction for wages as if they were purchases of materials by the employer<sup>26</sup> while a simple subtraction-method VAT does not. Under both e-VAT and the flat tax, wage earners would be taxed on their wages at rates that could be set as graduated or flat, with or without a zero rate bracket amount, personal exemptions, and personal deductions.

E-VAT, the flat tax, and the X-Tax share a distinguishing feature. By allowing a business-level VAT credit for wages in the case of e-VAT, or a deduction for wages in the case of the flat tax and X-Tax but taxing those wages at the individual wage earner level, all of these two-tier taxes divide the tax into two distinct parts: a business-level tax, which is imposed on a traditional VAT base but modified for wages, and a wage tax at the individual level. Progressivity can be built into the system by using a graduated rate system for the wage tax. The tax can also be personalized by allowing personal exemptions and tax expenditure deductions from the wage tax, although the tax need not be personalized in this manner.

E-VAT is superior to the other two-tier systems because it uses a credit-method VAT as the business-level tax instead of a subtraction-method VAT. This feature allows it to be collected automatically and electronically.

<sup>24</sup>Section I presents the method of a subtraction-method VAT as well as other forms of a consumption tax, including the Hall-Rabushka flat tax. This section discusses the relationship among them.

<sup>25</sup>Hall and Rabushka proposed a flat rate equal to the VAT rate, with a zero bracket amount, personal exemptions, and limited individual deductions. Hall and Rabushka, *supra* note 14, at 55-64. Bradford proposed another two-tier consumption tax, which he called the "X-Tax." Bradford, *supra* note 17, at 1449. On the business side, the X-Tax also consists of a modified subtraction-method VAT in which wages are allowed as deductions and the remaining base is taxed at a single rate. *Id.* at 1451. However, on the individual side, the X-Tax couples the subtraction VAT with a graduated rate wage tax in which the top tax rate is set at the VAT rate. *Id.* at 1450. Bradford wrote extensively on this proposal, *supra* note 18, at 13-29. In this publication, he suggested that the compensation tax component of the X-Tax should depart from a wage tax, and should instead take the form of a cash flow consumed income tax. *Id.* at 13-14. Bradford noted that his X-Tax could capture the drawdown of a worker's qualified retirement savings in the individual's tax base without having to view it as a type of deferred wages, which would be the case if the compensation tax component took the form of a wage tax, under which investment returns would be excluded from the tax base. *Id.* at 18-19.

<sup>26</sup>Hall and Rabushka, *supra* note 14, at 62.

## B. E-VAT at the Business Level

E-VAT avoids the administrative costs of annual accounting and collection by using a modified credit-invoice VAT instead of a subtraction-method VAT as its structural foundation. The business-level credit-method VAT would be a point of sale or transaction tax, which could be collected in each transaction rather than on an annual basis. E-VAT combines a single rate credit-invoice VAT, modified for wages, with a progressive wage tax to build in progressivity. This two-tier structure based on a credit VAT facilitates both progressivity and the pay-as-you-go collection system of a transaction tax. Transaction taxes impose an automatic framework to the taxing process because they lend themselves to electronic tracking and tax collection. E-VAT would thus be an appropriate name for the proposal.

A credit VAT, the foundation of e-VAT, can be inexpensive, accurate, and virtually leakproof in an economy in which money transfers take place electronically. To illustrate this point, consider customer Swoozy's retail purchase of shoes from retailer Roy in the foregoing example. When Swoozy's debit card is swiped to make the purchase — which is processed electronically — Roy in effect gains access to Swoozy's bank account. The appropriate amount, including the VAT, would be automatically withdrawn from her account. The clearing bank, which handles the transaction electronically, would then make an automatic entry, debiting Swoozy's account for the purchase price plus the VAT, crediting Roy's account for the purchase price and crediting the government's tax collection account for the VAT. All of these operations would be programmed to be part of the clearing bank's normal operations. Other electronic funds transactions between businesses would work in the same manner, even without an actual debit card.

If Swoozy chose to use a credit card instead of a debit card, the transaction would operate in much the same way from Swoozy's and Roy's points of view. The only difference would be that the clearing bank would charge Swoozy's credit account for the appropriate amount, thereby establishing a lending transaction rather than making an immediate withdrawal from Swoozy's bank account. Swoozy's account would be charged with both the purchase price and the appropriate VAT. As in the debit transaction, the VAT would be immediately credited to the federal government's tax collection account. This immediacy would make the tax collection effectively automatic.

At the business supplier level, one would expect that payments would be made by other electronic means besides a debit or credit card, such as electronic funds transfers (EFTs). Indeed, even paper checks are now being cleared electronically<sup>27</sup> and are thus best characterized as EFTs. Cash purchases at the noncriminal business

<sup>27</sup>See generally Catherine Lee Wilson, "Banking on the Net: Extending Bank Regulation to Electronic Money and Beyond," 30 *Creighton L. Rev.* 671 (1997) (describing electronic checks as paper checks that are created and cleared electronically). This report anticipated that paper checks would be cleared electronically in the near future because of the cost savings associated

(Footnote continued on next page.)



level are rare, if existent to any extent, but could be dealt with in the manner described later in this report for cash retail purchases.

The numerical example discussed earlier in this report will illustrate the mechanics of e-VAT's tax collection. Swoozy's retail purchase of shoes from Roy in the amount of \$100 made by credit or debit card would be subject to a VAT set at a tax-inclusive rate of 20 percent, so that the stated purchase price would already include the \$20 VAT.<sup>28</sup> When Swoozy's credit or debit card is used to make the purchase, an amount equal to the \$100 purchase price of the item would be charged to her credit account or subtracted from Swoozy's bank account, depending on her choice of purchase card. At that time, the \$20 tax portion of the charge would be credited immediately to a tax collection account of the federal government at the financial institution handling the electronic bookkeeping. E-VAT would provide that the charge be bookmarked with a taxpayer identification number to identify the purchaser for credit. The financial institution's tax collection account would be transferred either immediately or at the end of each day to a Federal Reserve account. The procedure would be exactly the same, regardless of whether a debit card, credit card, or other means of EFT were used. In all cases, the tax assessed at the point of sale on the transaction would be immediately charged to the purchaser, Swoozy, and credited to the government's account. All of the parties would know the amount of the charge that represented the direct sales price and the amount of the charge that represented the tax.

The transmittal of the VAT to the government is not the end of the process for Roy, the seller. Roy would be entitled to a credit on the VAT that he previously paid to his supplier, Manny, in the amount of \$14, based on a purchase price of \$70. That amount of \$14 would have been paid automatically and electronically to the government by Manny on his sale to Roy.<sup>29</sup>

Records of a seller's allowable credits would be maintained because the financial institution would have previously reported — both to the seller and to the taxing authority — the VAT paid by the seller on its initial purchases. Each seller in the chain could retrieve its VAT credit by filing a claim for the VAT previously paid. The taxing authority would then credit the seller's bank account with the amount of its allowable VAT credit. This credit procedure could take place monthly or bimonthly, or perhaps even more frequently. While the identification

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with electronic clearing as compared to manual clearing. It is estimated that banks save approximately 80 cents for every transaction eliminating paper checks. Christopher B. Woods, "Commercial Law: Determining Repugnancy in an Electronic Age: Excluded Transactions Under Electronic Writing and Signature Legislation," 52 *Okl. L. Rev.* 411, 451 (1999).

<sup>28</sup>Appendix A presents a discussion of tax-inclusive and tax-exclusive tax rates and their algebraic relationship. This example could have used the economically equivalent tax-exclusive tax rate of 25 percent, with the VAT added onto the purchase price of \$80, which would also generate a VAT of \$20.

<sup>29</sup>See Appendix A (explaining the mechanics of a credit-invoice VAT).

of the VAT credit to be returned to the seller would not be automatic, an official claim would be made for the previously paid VAT, and proper identification of the purchased items that gave rise to the VAT credit could be verified electronically on audit by the taxing authority, which would already have most of this information in its database.<sup>30</sup> For those purchases that were not made electronically (that is, not using EFTs, credit or debit cards, or checks — likely an insubstantial number of transactions today), some actual invoice audit and verification may be required. The cost of this procedure, however, would pale in comparison to an income tax audit under the current system. A similar issue arises with the seller's reporting of its nonelectronic sales receipts, which could be done when the sale is made or when the seller makes cash deposits to its financial institution.

Alternatively, sales and tax information collected by the financial institutions involved in the transactions could be accumulated by these institutions and transmitted to the taxing authority monthly, if it would be more efficient. Also, these institutions could be permitted to retain the tax funds for a specified number of days to compensate them for their extra expenses in facilitating the tax collections and reporting. The point here is that there will be many details and variations in the mechanics of collecting and reporting the taxes under this system, but the overall benefits of an electronic point-of-sale structure of the tax should be achieved.

Thus, the seller would not be required to file the traditional annual tax return required under the income tax. Rather, the seller would only have to file a claim for payment of its VAT credits and to make sure that the tax collector's electronic records of sales, purchases, corresponding VAT collections, VAT payments, and corresponding credits match the seller's own records, which they would if all parties were following prescribed procedures. Presumably, this cross-checking would be done automatically and periodically as a matter of course. It could be done monthly or bimonthly to correspond to the crediting procedure described above.

To be sure, this system puts a great deal of faith in modern technology and being able to trace every transaction electronically. Even under the current income tax, however, a great deal of faith is placed on electronic bookkeeping. The difference is that under the proposed system, the taxing authority has the ability to verify almost all of the taxpayer's VAT payment obligations and VAT credits independently, because they are derived from the reporting required by the transactions themselves. In contrast, under the current income tax, taxpayer representations about income and deductible

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<sup>30</sup>Social Security payroll tax payments (both the employee's withheld amount and the employer's share) are coded with the employee's Social Security number and find their way into a Social Security retirement benefit calculation for the employee. If this system can work there, it can work here, as long as a taxpayer's employee identification number is used for all of the sales and purchase transactions in which the taxpayer engages.



expenses are generally accepted on faith by the IRS and without verification unless the IRS undertakes an audit of the taxpayer.

One might contend that this same system could be used if a retail sales tax were adopted in lieu of a VAT. The essential difference between a VAT and a retail sales tax, in terms of collection mechanics, is that under a retail sales tax the automatic payment method described above for the retail sale would be the end of the process. In other words, tax would be collected only on the final retail sale, not on the sale of intermediate goods, as would be the case under a VAT. In contrast, under a VAT, the seller would need to receive a credit separately for the VAT that it paid to its suppliers of raw materials. As discussed above, the credit process under a VAT would involve an additional step to complete the tax collection process.

Nevertheless, the e-VAT proposal chooses the VAT over a retail sales tax. Taxing the intermediate transactions under a VAT would reduce the risks of evasion, because the failure to collect the tax at the point of the retail sale would result in forfeiture of the seller's credit for any tax paid on the purchase and therefore would involve a smaller loss of revenue than would occur under a retail sales tax.<sup>31</sup> It would also avoid the potential tax evasion that could result from a buyer mischaracterizing a purchase as a business purchase, on which no retail sales tax is due, instead of as a consumption purchase. Under a VAT, the purchaser would be required to make that mischaracterization to the government when it claims its credit. Thus, while the falsification under a retail sales tax would be one of nonreporting of the sale, the falsification under a VAT would involve an affirmative mischaracterization of an amount already reported to the government. This would arguably make the mischaracterization claim easier for the government to review and verify under e-VAT. Moreover, a VAT-based system allows for progressivity as described below.

E-VAT is an improvement over the flat tax because a credit VAT is superior to a subtraction VAT. The problem with a subtraction VAT is that it requires annual computation and collection. Under a pure subtraction VAT, the tax due at each stage is computed annually by multiplying the VAT rate by the excess of the taxpayer's gross receipts over its deductible expenditures for the year. The cost of raw materials and capital are deductible in computing value added,<sup>32</sup> but the cost of labor and returns on capital are not.<sup>33</sup> The flat tax and X-Tax build

on this structure by modifying the treatment of wages, but they retain the characteristic that the tax would be computed annually by sellers and wage earners and would be collected annually from enterprises at each stage of production. Thus, a subtraction VAT must be computed and audited manually to ensure compliance, because there would be no automatic, authoritative compilation of the sales and purchases on which the taxing authorities could rely. Further, because sales and purchases do not involve the flow of tax funds collected at the time of sale, there would be no electronic trail left by the flow of funds. As such, a subtraction VAT would rely on taxpayer self-reporting.

These characteristics — annual collection, a manual and time-consuming audit process, and reliance on self-reporting by taxpayers — are failings shared with the current income tax. These failings have been controlled somewhat under the current income tax law by government withholding of tax on wages and some other types of individual income and by reporting requirements on Form W-2 for wages and Form 1099 for other types of income. That compliance solution, however, is far from complete. For example, transactions whose tax consequences depend on basis, such as sales of property, remain unverified absent an IRS audit. Further, the reporting requirements generally do not extend to payments made to corporations until after December 31, 2011.

### C. E-VAT at the Individual Level: Wages

The treatment of individual wage earners under the wage component of e-VAT would seem simple to the individual. Individuals would receive the familiar Form W-2 from their employer showing as wages the cash amount that they received plus a "withheld" amount. This withheld amount would serve as a prepayment of the tax shown on their simple tax return. No interest, dividends, gains, or even found money would have to be reported on the simple tax return, nor would any deductions. As discussed earlier, progressivity and any desired personalizing of the tax would be introduced at the wage earner level, just as it would be under the flat tax and X-Tax proposals, by choosing to allow personal exemptions for the taxpayer, the taxpayer's spouse, and children as well as deductions. Progressivity and personalizing would also be introduced at the wage earner level by applying a tax rate structure starting with a zero bracket amount followed by graduated rates.

What is going on behind the scenes, however, is something more complex and quite clever because it accomplishes user simplicity. Recall that at the business level, the seller collects the VAT on the full price of the product or service sold. Yet the portion of the VAT collected and attributable to wages will be available to the employee as taxes paid on his behalf, similar to withholding.

One way to understand the internal workings of the system is to envision a structure in which wages are subject to a VAT. A business paying wages would be entitled to a credit for the VAT on those wages against the VAT collected on sale of its products. However, no separate VAT payment has to be made for wages, because the VAT on those wages would have already been

<sup>31</sup>See Reuven Avi-Yonah, "Risk, Rents, and Regressivity: Why the United States Needs Both an Income Tax and a VAT," *Tax Notes*, Dec. 20, 2004, p. 1651, *Doc 2004-23199*, or 2004 TNT 245-37.

<sup>32</sup>See generally 3 Treasury Department, *Tax Reform for Fairness, Simplicity, and Economic Growth* (1984). The cost of capital is fully deductible only in a consumption-style VAT, not a GDP or income-type VAT. *Id.* at 5-7.

<sup>33</sup>*Id.* at 5-7; see also Gilbert Metcalf, "The Role of a Value-Added Tax in Fundamental Tax Reform," in *Frontiers of Tax Reform*, 97 (1996) (noting that value added includes the value of labor and the return to capital, and thus both would be included in the tax base).

remitted to the taxing authority when the products were sold by the employer. The employer's VAT credit and the employee's VAT payment would offset each other as far as the taxing authority was concerned. By not permitting the employer to take an actual credit on the VAT paid for employees, the VAT attributable to the wages paid would remain with the taxing authority.

Nevertheless, from the employer's point of view, the VAT paid by the employer on the sale of products that is attributable to its payroll costs would be treated as the VAT paid by the business on wages paid to its employees. Thus, the taxes paid by the business firm on an amount of sales equal to an employees' wages would become the VAT paid on behalf of that employee and would be credited to the employee's wage withholding account with the federal government. Employees would therefore be taxed on the full amount of their wages, and the amount of those wages (including the VAT amount attributable to the wages) could be viewed as the employee's wages subject to the wage tax.

Another way to understand the internal workings of the system is to view the wage component of the structure as if there were tax withholding on wages, as explained below. Under e-VAT, employees are taxed on their wage income, including the withheld amounts. This latter computation of including the withheld amount as a component of the employee's wages is sometimes referred to as "grossing up" the wage amount for withheld taxes.

Under either of these two descriptions of the inner workings of the system, the resulting wage amount would be used to compute the wage tax. This wage tax could be computed at either a flat rate or a graduated set of rates, and with or without a zero rate amount, exemptions, and deductions. The withheld amount would be available to offset the employee's tax.

In short, under both ways of understanding the system, the VAT collected from the employer attributable to the employee's wages would be available as a refundable credit against the employee's wage tax liability. In theory, the VAT collected on wages would serve as an advance collection of the employee's tax on wage income. Under a system of electronic payments, the VAT amount on wages would be credited, automatically and electronically, to a tax payment from the employee on wages through a tax credit account for the individual employee. If the VAT charged to the employer on the wage portion of its product were equal to the wage tax assessed on the employee, no additional payments would be required. If the VAT charged to the employer on the wage portion of its product exceeded the employees' wage tax liability, the employee would be entitled to a refund. If the wage tax liability exceeded the VAT, additional tax would be due from the employee.

Returning to our earlier example, suppose an employee, Winifred, was employed by Manny and earned \$10 for her employee services. Assume a tax-inclusive VAT of 20 percent and a wage tax at that same tax-

inclusive rate.<sup>34</sup> Recall that Manny had sold shoes to retailer Roy for \$70, on which he paid VAT of \$14 (\$70 x 20 percent). When Manny's firm — which has collected \$70 from Roy — pays wages to Winifred in the amount of \$8, that \$8 wage amount, plus the \$2 VAT on that amount, would be taxable to Winifred. The amount of \$10 would appear as wages on Winifred's Form W-2. Winifred, however, would be entitled to a refundable credit equal to the \$2 VAT that had been paid by her employer, Manny, on her wages. Conceptually, this amount can be viewed as the amount collected by Manny from its customer, Roy, on that \$10 grossed-up wage amount. That \$2 amount represents the VAT on the portion of Manny's \$70 sale price attributable to Winifred's wages. Thus, if Winifred's wage tax — computed by subtracting from wages the applicable zero rate amount, personal exemptions, and personalized deductions — were less than \$2, no additional tax would be due, and depending on the rate structure, some of the tax credit could be refunded to Winifred. In contrast, if Winifred's wage income were high and the applicable tax rate on that income exceeded 20 percent, Winifred would still have additional tax liability after taking into account the \$2 credit. (It should be noted that Winifred's wage tax could be computed with or without a gross-up of the \$2; the choice would simply reflect the desired effective rate of the wage tax component.<sup>35</sup>) In this manner, by engrafting a wage tax onto the VAT, the tax system could be personalized for wage earners, even though substantially all of the tax due would have been collected at the point of sale via a credit VAT.

This system could also be implemented statutorily in a slightly different way. The wage earner's tax could be enacted as a yield exemption consumption tax in which wages — but not investment income — are taxed. The tax on wages would be subject to employer withholding. The employer, in turn, could be allowed a VAT credit for wage taxes withheld. This system would function mechanically, however, in the same manner for the employer as the payment of a VAT on wages. The wage withholding on the personal services income of an employee would generate a credit to the employer, but an equivalent amount would be subtracted from the employee's wages and automatically paid to the government. If the employee were then taxed on a base measured by wages in a manner similar to a personalized yield exemption consumption tax — with a zero-rate amount, graduated rates, personal exemptions, and deductions — the withholding on the employee's wages would serve as an offset to the employee's wage income tax. This amount could be refunded for a low-wage employee (which would be determined by an aggregate of all of the employee's wages earned during the year). High-wage employees would have to pay additional tax if their tax liability were greater than their withheld amount.

<sup>34</sup>See Appendix A (demonstrating the equivalence of a 20 percent tax-inclusive rate and a 25 percent tax-exclusive rate).

<sup>35</sup>See Appendix A (describing "gross-up").

Both methods of implementing the wage component of e-VAT, described above, would be economically equivalent if the VAT rate and wage tax rate were the same. They would differ only in the technical description and legal incidence<sup>36</sup> of the tax on wage earnings. In the first system, the legal incidence of the tax is on the employer, and the tax paid by the employer is available, computationally, as a refundable credit to the employee. In the second system, the legal incidence of the tax is on the employee, but the tax is satisfied on behalf of the employee automatically through withholding by the employer. Importantly, however, regardless of the method used to characterize the system, the process will be the same for the wage earner and will remain simple for individuals.

If the wage tax rate exceeded the credit VAT rate, the conceptualization of these methods would differ. Any excess would more properly be characterized as a yield exemption consumption tax or loosely as a wage income tax. In combination, these taxes comprise a consumption tax system that can be progressive by incorporating a yield exemption component and thereby imposing the legal incidence for a portion of the tax on wage earners.

Importantly, combining a wage-type tax with a credit VAT allows e-VAT to incorporate important components of the existing income tax, such as the earned income tax credit, and to coexist easily with existing payroll taxes. For example, the refundable credits for employees would serve as a substitute for the current EITC, although in a substantially simplified form. Low-wage earners would, in effect, receive a wage subsidy, which would be computed annually but could be converted to periodic payments in the same manner as under the current EITC.

Also, the wage component of e-VAT allows the tax system to maintain its current funding mechanisms for Social Security and Medicare, which are payroll-based, because wages would still need to be tracked and reported under e-VAT. Retaining Social Security and Medicare as wage-based might or might not be desirable in the long run (this issue is beyond the scope of this report). Regardless, when large structural changes are made to the government's principal revenue source, it is highly desirable to leave other tax processes intact.

Finally, if the wage component of e-VAT could be kept free of tax expenditure deductions such as home mortgage interest, the system could be made return-free. The wage earner would simply submit a Form W-4 to his employer and the government, listing his dependents, and the employer could compute the exact amount of the wage tax. If that tax exceeded the VAT attributable to the wages, the employer could withhold an additional amount. If the tax were less than the VAT attributable to wages, the employer could advance an additional amount to the employee, and the employer could reduce its VAT payment to the government by taking a credit for the additional advance payment to the employee.

Interestingly, such a system, if it also contained tax expenditure deductions for individual wage earners,

would highlight the real costs to the government of those tax expenditures. That would be true because those tax expenditures would be the only source to generate a tax refund to the wage earner.

#### D. Progressivity

It is desirable from an administrative point of view to set the business tax at a rate not less than the highest individual tax rate. This decision derives from the fact that the risk of manipulation by taxpayers in optimizing their tax rates lies in the area of small proprietor-owned businesses, often referred to as closely held businesses. In these businesses, owner-operators often can choose to extract earnings from the business through salaries or through distribution of profits. Left to their own unchecked devices, these taxpayers would choose the most "tax efficient" method — that is, the method that would result in the lowest tax. If the individual wage tax rate were to exceed the business tax rate, one would expect the owner-operator to seek to take funds as a distribution of profits, resulting in those distribution amounts being subjected to only the business tax rate. The owner-operator could also leave the cash in the business for future distribution, thereby using the business as a tax haven.

For example, if the individual wage tax rate were 34 percent and the business tax rate were 28 percent, a business owner-operator would get a tax advantage by taking a small wage (contending that his work was minor in the enterprise), avoiding a 34 percent tax in lieu of having his business subject to a 28 percent tax.

In contrast, if the business tax rate exceeded the individual's wage tax rate, owner-operators would seek to extract the funds as wages. For example, if the business tax rate were 34 percent and exceeded the top individual wage tax rate of 28 percent, owner-operators would have an incentive to make all payments from the business as wage payments to themselves, rather than as distributions. However, if the two rates were equal, owner-operators would be indifferent with regard to how the money was paid to them.

Establishing the appropriate amount of compensation in the situations in which the individual and business tax rates differ could be administratively burdensome and expensive, making the tax likely to generate controversy. One way out of this dilemma is to recognize that the top individual wage tax rate should equal the business tax rate, thereby avoiding the manipulation described above. Establishing a single rate of tax for both wage earners and businesses would avoid the issue entirely. However, pursuing this option could be inconsistent with the political necessity of progressivity.

Regardless of political demands, progressivity at the top rates should be discouraged. An optimal rate structure would be achieved by setting the top wage tax rate and the business tax rate at the same level. Moreover, these top rates should be tied together in structure so that they could be increased or decreased in later years only simultaneously, not individually or separately. This solution still leaves open the opportunity for manipulation at

<sup>36</sup>For a discussion of the difference between economic incidence and legal incidence, see Section I of this report.



lower wage tax rate levels, but the amounts likely involved would be relatively small because the problem would largely involve low-earning businesses or children of the owner-operators.

In theory, the administrative problems described above are present in the current income tax and Social Security tax systems. For example, S corporation owners often seek to avoid payroll tax by taking “distributions” instead of wages. Yet a body of case law as well as administrative rules have developed to seek to deal with this problem. Conversely, owner-operators throughout history have sought to avoid the corporate level tax by paying distributions disguised as wages. A body of law has also developed here, limiting corporations’ deduction for wages to only the amount that is “reasonable” for the services actually performed.

As explained above, both potentially troublesome issues could be avoided by a uniform tax rate applicable to both businesses and wage earners. If a progressive system is to be achieved, however, some damage must be accepted to the simplicity of the system. The damage can be minimized by equating the business tax rate to the top wage tax rate.

#### E. E-VAT Puts the Estate Tax in Its Rightful Place

E-VAT facilitates an estate tax that is free from the complaint of the estate tax’s current critics — that it represents a second tax on saved income and is therefore unfair. Under e-VAT, the estate tax would be the only time when saved income would be taxed.

The estate tax rate would be set at the same rate as the business e-VAT tax rate. Also, a gift tax at that rate would be retained to backstop the estate tax, as it does under the current system. Gift and estate taxes at the same rate as e-VAT would fit consistently with the conceptual underpinnings of e-VAT as a consumption tax. E-VAT would represent a consumption tax during life, taxing consumed wealth, while the estate tax would tax unconsumed wealth at death. As such, e-VAT and the estate tax, along with the gift tax, would form an integrated tax system grounded on consistent principles. Use of the standard e-VAT rate for the estate and gift taxes would facilitate collection on wealth transfers at death and during life. Linkage of these tax rates would also reinforce the conceptual unity of the e-VAT system.

In this manner, the estate and gift taxes would perform their original functions of retarding the accumulations of dynastic family wealth.<sup>37</sup> The estate and gift taxes would contain exemptions, exclusions, and other rules that are similar to the current versions<sup>38</sup> but presumably less porous and more inclusive. For instance, the minimum size of a taxable estate would be significantly less than \$7

million for a married couple and \$3.5 million for a single individual, the beginning points under the current discussion.<sup>39</sup>

Taxation of amounts saved and not consumed under e-VAT would, by virtue of the estate tax, simply be delayed. This feature should blunt the charge by income tax advocates that e-VAT is regressive, and the charge by estate tax opponents that the estate tax is a death tax on wealth that has already been taxed.

#### F. E-VAT Corrects the Flaws of the Income Tax

E-VAT avoids most of the failings of the current income tax and improves the process with regard to failings that are inherent in any tax system and thus cannot be entirely avoided.

**1. Uncertain tax base of the income tax.** The tax base, which is uncertain under the income tax, would be substantially more certain under e-VAT. Under e-VAT, the law would not have to draw a distinction between a capital expenditure and an ordinary, current deduction. Rather, all business expenditures would give rise to a VAT credit. Thus, the distinction between ordinary deductions and capitalization, which is so troublesome under the current income tax, would be irrelevant under e-VAT. At the business level, all expenditures for business, both ordinary expenses and purchases of property other than financial assets like stocks and bonds, would be subject to a VAT and would be allowed a full VAT credit in the year they were incurred. This feature would eliminate judgment calls about the length of time over which the expenditure would be depreciated and the need to audit those judgment calls.

Moreover, these distinctions would also disappear at the individual wage earner level under e-VAT. Appreciation of investment assets, whether realized or unrealized, would not be subject to tax at the nonbusiness level because the tax at that level would be a wage tax. Thus, the problem of the realization requirement under the income tax would become a nonissue under e-VAT. Increases in the value of investment property, whether realized or unrealized, would not be subject to tax unless spent on consumption. No tax on investment income would be collected under the wage earner part of e-VAT. Rather, the tax would be collected at the business level as a VAT, so the wage earner would not experience the payment of the tax by making a payment to the IRS. Instead, the wage earner would pay the tax as part of the price of the goods or services purchased for consumption.

The business-personal distinction, which is troublesome under the income tax, is unavoidable under both tax systems. Under e-VAT, one must still determine whether the VAT paid for the good or service is permitted to be used as a VAT credit by the purchaser. If the expenditure was business, a credit would be allowed. If the expenditure was personal, a credit would not be allowed. The determination of whether the item is business or personal would present the same issues under

<sup>37</sup>See Anne L. Astott, “Equal Opportunity and Inheritance Taxation,” 121 *Harv. L. Rev.* 469, 470-471 (2007); cf. Louis Eisenstein, “The Rise and Decline of the Estate Tax,” 11 *Tax L. Rev.* 223, 226-227 (1956) (arguing that the federal estate tax was originally intended as a revenue source and that the “movement [that] identified death duties with the social control of hereditary wealth” occurred at the end of the 19th century).

<sup>38</sup>The relevant provisions of the estate and gift taxes are contained in sections 2010-2015, 2051, and 2053-2058.

<sup>39</sup>See section 2010 (describing the available credit against the estate tax).

both tax systems. Indeed, those issues would be the same regardless of the form of income tax or consumption tax chosen. What is different under e-VAT is that each transaction for which a determination must be made is reported separately and electronically, allowing for easier identification by auditors and more robust verification by the taxing authorities. E-VAT also would enable disallowance of a VAT credit on some expenses deemed inherently personal.<sup>40</sup>

**2. The flawed and outmoded design of the income tax.** The flawed and outmoded design of the income tax's tax assessment and collection process makes compliance and planning under the income tax expensive. Also, those features make the administration of the income tax expensive as well. In contrast, e-VAT offers a clean and automatic system of tax assessment and collection.

Compliance would be largely electronic under e-VAT. IRS oversight would be easier and more complete, because the transparency of the taxing process and the availability of computer recordkeeping and verification would allow VAT payments and credits to be tracked electronically. As a result, e-VAT is substantially simpler and less susceptible to cheating than an income tax. Accordingly, one would expect the tax gap caused by tax cheating under the current system to be substantially reduced if not virtually eliminated. This would result in a direct and important reduction in tax for honest tax-paying individuals and businesses.

At the individual level, e-VAT permits the use of a much simplified tax return. To the extent that tax expenditures were left in the system, their effect would become glaring.

**3. No disincentive for saving and investment.** E-VAT, like other consumption taxes, contains no perverse disincentives against saving and investment. As such, it should provide the same economic benefits that other consumption taxes would provide. It does not, however, allow avoidance of business-level tax through investments in financial assets like stocks and bonds. This is because no VAT is charged on the purchase of investment assets, so no VAT credit would be permissible to offset VAT owed by the business taxpayer.

**4. Removes the current tax bias toward leverage.** E-VAT treats interest expense payable on debt as nondeductible at the business tax level and thus equivalent to returns to equity. As a result, e-VAT corrects the destabilizing bias of the current income tax toward debt financing over equity financing.

**5. No great distributional effect on the tax burden.** Finally, e-VAT is progressive. It therefore does not have the same tax distributional effects as a VAT or retail sales tax. Further, it ultimately collects tax on a taxpayer's accumulated income when combined with nonporous estate and gift taxes, but unlike the current system, it collects that tax only once.

### G. An Easy Tax, But at What Rate?

Die-hard defenders of the income tax will likely argue that the tax rate required of a consumption tax, such as

e-VAT, will be so high as to dissuade adoption. Moreover, they will likely claim that the burden will fall entirely on labor.

The authors of *The FairTax Book*, as well as an academic advocate for this tax, Prof. Laurence J. Kotlikoff, estimate that a tax rate of 23 percent for a consumption tax in the form of a national sales tax would be sufficient to collect the amount of tax now collected by the income tax, payroll taxes, estate taxes, and gift taxes, and to provide a rebate to each household.<sup>41</sup> An economist and critic of *The FairTax Book*, William G. Gale of the Brookings Institution and the Tax Policy Center, disputes this low figure and instead estimates the rate to be around 39 percent.<sup>42</sup> These are both tax-exclusive rates.<sup>43</sup> The difference between these estimates might have to do with whether governments — including state and local governments — would be required to pay the tax on their purchases (the higher figure assuming not, while the lower figure assuming they would), and whether private education and travel would be included in the tax base. Moreover, even using Gale's assumptions of coverage, Kotlikoff disputes the resulting tax rate and estimates it to be around 23.82 percent.<sup>44</sup>

This dispute and these figures carry over to e-VAT, because e-VAT, for these purposes, is essentially a nuanced VAT. E-VAT rates, when converted to a tax-exclusive rate, are directly comparable to traditional sales tax rates. Assuming that the business-level tax and the wage tax were set at the same tax rate, e-VAT's business level VAT rates would be 30 percent under Kotlikoff's estimate, 65 percent under Gale's higher estimate, and 31.27 percent under Kotlikoff's estimate using Gale's coverage assumptions. These numbers would be somewhat higher under e-VAT because of its graduated wage tax component for low-wage workers. Beyond these estimates, I have no better estimate of the expected rate. These two economists are well respected. Moreover, I think that the actual rate is a red herring in the tax reform discussion.

If we assume that the tax sought to be collected and retained by the government under a substitute tax should be the same as under the current income tax (and other taxes), e-VAT is clearly superior to the income tax. That is because it saves the deadweight cost of the current income tax and will substantially reduce cheating and

<sup>41</sup>See Laurence J. Kotlikoff, "Saving and Consumption Taxation: The Federal Retail Sales Tax Example," in *Frontiers of Tax Reform*, *supra* note 33, at 160, 170.

<sup>42</sup>William G. Gale, "The National Retail Sales Tax: What Would the Rate Have to Be?" *Tax Notes*, May 16, 2005, p. 889 (arguing that the tax-inclusive rate would need to be 31 percent, and that if the rate was set at 23 percent tax-inclusive, revenue loss would exceed \$7 trillion over the next 10 years). See also Gale, "The Required Tax Rate in a National Retail Sales Tax," 52 *National Tax J.* 443 (1999).

<sup>43</sup>See Appendix A.

<sup>44</sup>Paul Bachman, Jonathan Haughton, Laurence J. Kotlikoff, Alfonso Sanchez-Penalver, and David G. Tuerck, "Taxing Sales Under the Fair Tax: What Rate Works?" *Tax Notes*, Nov. 13, 2006, p. 663, *Doc 2006-21659, 2006 TNT 219-51* (responding to Gale's analysis and arguing that 23 percent is "eminently feasible").

<sup>40</sup>See Section III, *infra*, of this report.

thereby close the tax gap. The savings from fewer government tax administrators, if passed back to the taxpayers in the form of lower rates, as well as from fewer private sector tax compliance professionals and tax planners, should leave the taxpayers as a group with significantly less overall tax and other tax-related expenses than under the current income tax. This should be the case regardless of the macroeconomic consequences.

And there will likely be positive macroeconomic consequences. E-VAT's decision to tax only consumption and not savings or investment should allow the economy to accumulate domestic capital, become more capital intensive and efficient, and grow as a result.

Will these cost-saving and macroeconomic benefits be sufficient to convince die-hard income tax defenders of the wisdom of adopting e-VAT? The die-hards likely will contend that relieving capital from a share of the tax burden will unduly shift the burden entirely to labor, and that shift alone will require higher tax rates than would exist under a broad-based income tax. My response to those claims is that the current income tax is not actually a broad-based income tax now<sup>45</sup> and that the relief of capital that is not now eligible for the preferred treatment under the current tax system will be far outweighed by the benefits from e-VAT that were discussed in this section. This proposition can neither be proven nor disproven. Most economists who have considered and written on the subject of consumption taxes, however, believe this proposition to be true for consumption taxes in general, even without the additional cost and tax gap savings that will result from e-VAT.

### III. Special Considerations

E-VAT, described in the previous section, looks like a system that is efficient, fair, and relatively leakproof, and that creates the appropriate incentives for taxpayers. At this point, you may be wondering "wait, are we missing something?" This section will anticipate objections to e-VAT that income tax apologists are likely to make. It will also discuss some special situations and explain how e-VAT would deal with these situations. This discussion should demonstrate the adaptability and durability of e-VAT and its superiority over the income tax.

#### A. Anonymity

It is anticipated that most retail transactions would be undertaken with either a credit card or a debit card. In some cases, however, a customer may desire a more depersonalized method of payment. For example, a taxpayer may want confidentiality regarding his purchases. This confidentiality could be achieved by allowing the customer to purchase a stored-value card, which operates like a debit card and automatically accesses a specific account at a financial institution but is not necessarily associated with the individual possessor of the card. All of the major credit card companies now issue stored-value cards.

Alternatively, a customer could purchase a cash card. Cash cards could be printed with magnetic strips similar

to the Metro fare cards in Washington.<sup>46</sup> which have amounts encoded on their magnetic strips but do not access a central account. They would not store much value and will tend to be dedicated to prepaid services (for example, metro systems and parking meters) and as such could be used for small incidental and prepaid purchases. Both the Washington Metropolitan Area Transit Authority in greater Washington and its surrounding suburbs and the Metropolitan Transit Authority in New York as well as several other mass transit systems now use cash cards.

Stored-value cards could be treated in one of two ways. They could simply be used as a mechanism of transferring pocket money by an individual. When used, the cards would be treated as a debit card, with VAT collected at the time of use. Alternatively, stored-value cards could be subject to a VAT when purchased. For example, assuming again a VAT rate of 20 percent, a customer could purchase a stored-value card with \$80 value by having \$100 debited from his account, which would result in only \$80 of stored value being placed on the card. Under this approach, customers would have only the actual cost of each purchase, without any VAT amount, subtracted from the balance on their cards. Merchants would keep the entire proceeds from the sales made with these cards, because the government would have already received its VAT when the customer purchased the stored-value card. The first approach would be more consistent with the e-VAT mechanics as a whole, although the second method may better assure tax collection. Neither works well for nonretail purchasers who desire anonymity and who expect to use the VAT paid as a credit against VAT owed on their sales. Thus, if such a purchaser of intermediate goods or services desires anonymity, he may have to forgo the available VAT credit. However, this conundrum faced by purchasers is no different than under the income tax, which requires that they establish their deductions or cost of equipment or inventory.

Cash cards raise similar issues, but of lesser magnitude because they likely will store less money and represent a prepayment for services yet to be rendered. As such, it would seem administratively easier to view the purchase of one of these cards as itself a retail purchase subject to e-VAT at the time of purchase.

To mitigate the risks of easy tax avoidance so that taxpayers can enjoy the speed and convenience of stored-value and cash cards, it will be necessary to ensure that

<sup>46</sup>For example, in Washington Metro riders purchase debit SmarTrip or fare cards and put a given amount of cash on the card. The rider flashes the SmarTrip card or inserts the fare card to enter the station, and then reinserts the card to exit. The amount debited is based on the distance traveled and the time of day traveled; for instance, it is more expensive to travel during rush hour than on the weekends. The difference between the cards lies in the central repository nature of the SmarTrip card, which allows it to keep track of any remaining value on the user's account, whereas the fare card uses only a magnetic strip on the card to keep track of its value. See generally Washington Metropolitan Area Transit Authority, SmarTrip, available at <http://www.wmata.com/fares/smartrip/>.

<sup>45</sup>See Goldberg, *supra* note 23.



the cards cannot become a medium of exchange. This could be accomplished by personalizing the cards, so that the cards could be used by only the original purchaser, and by preventing transfer of the value embedded in one card to cards not owned by the original purchaser.

To prevent stored-value cards from being used as a substitute for currency and thereby to avoid the VAT at the retail level under e-VAT, a card holder's personal identification attribute<sup>47</sup> (for example, a PIN, which is standard for debit cards under current technology, or a thumbprint or retinal image, which likely will be better supported by future technology) would be required to transfer funds from any unnamed account accessed by the card.

## B. Cash Transactions

The e-VAT system is also adaptable to an economy in which some transactions still take place using cash. Cash transactions, of course, would be subject to e-VAT and the VAT should be collected at the time of sale. The issue here is one of ensuring compliance, because cash transactions do not give rise to electronic trails unless the merchant causes an electronic trail to be generated. In those transactions, merchants would be required to record the transaction in the same manner as a debit or a credit card transaction, but they would direct the payment of the tax to the taxing authority electronically from their own funds. The merchant would have already collected from the customer a sufficient amount of cash to pay the tax. This payment of tax could occur automatically through the merchant electronically reporting the sale as a cash transaction or with the delay of a few days to allow the merchant to deposit the cash. Tax collection on cash transactions, nevertheless, would be heavily dependent on compliance by merchants.

A further complication could arise because some merchants might run their businesses entirely with cash or checks, not using any electronic transaction methods, such as credit cards or other EFT modes. Collection of tax from those merchants would require paper reporting and auditing, which could result in compliance problems. However, as cash payments become replaced in the economy by electronic methods,<sup>48</sup> any compliance issues would decline. Moreover, to the extent that there is a compliance problem, it would likely be limited to small-business retailers, such as mom-and-pop-owned clothing stores and grocery stores. Larger retailers such as department stores make their sales through employees using carefully monitored electronic registers, and therefore, for their own purposes, need to ensure that all sales —

<sup>47</sup>Currently, a PIN is used. However, one can imagine that a thumbprint or a retinal image could be substituted as soon as technology permits it. See, e.g., Randall W. Sifers, "Regulating Electronic Money in Small-Value Payment Systems: Telecommunications Law as a Regulatory Model," 49 *Fed. Comm. L.J.* 701, 714, 724-725 (1997) (describing security measures for smart cards).

<sup>48</sup>See generally Daniel D. Garcia Swartz et al., "The Economics of a Cashless Society: An Analysis of the Costs and Benefits of Payment Instruments," AEI-Brookings Joint Center for Regulatory Studies, Related Publication No. 04-24 (2004).

particularly cash sales — get properly recorded. Thus, even though the retail layer of the VAT might be at risk with regard to small retailers, the VAT would likely be reliably collected by large retailers and sellers of intermediate goods, such as business suppliers. As a result, the tax gap would likely be limited to a portion of the aggregate retail level markup. Revenue auditors, freed from the more burdensome income tax, should be able to ensure reasonable compliance.

## C. Policing Inherently Personal Expenses

Even under e-VAT, as would be the case with any consumption tax, a distinction must be made between business expenses and personal consumption expenses. Under e-VAT, like a traditional credit method VAT, the place in the taxation process at which this distinction needs to be drawn and confronted is the VAT credit. The credit for VAT paid is claimed by a business taxpayer for business purchases of new materials, equipment, inventory, and regular business expenses. The credit for VAT paid becomes available to offset the VAT collected and remitted to the taxing authority on the business taxpayer's sale of its product or service. In contrast, no VAT credit would be allowed for VAT paid on personal consumption expenditures. (Under e-VAT's wage tax component, no credit would be allowed for the VAT paid for unreimbursed employee business expenses.<sup>49</sup>)

The personal-business linedrawing that plagues the current income tax can be more easily handled under e-VAT. Under the current income tax, some kinds of expenditures, such as meals and entertainment expenses, must be characterized by taxpayers as either business (and therefore deductible within the applicable percentage limitation) or as personal (and therefore nondeductible). This characterization occurs on the business taxpayer's tax return and thus determines the taxpayer's tax owed (assuming there is no IRS challenge on audit, a process that is far from comprehensive).

e-VAT handles these issues much more transparently. First, this line-drawing question arises only at the business level under e-VAT, because the wage tax portion of e-VAT would not allow these types of deductions. Second, VAT credits for purchases for which they are claimed could be sorted and separately stated for easy identification by auditors, because all VAT-producing transactions are tracked electronically, using identifying numbers of both the purchaser, who will get the credit for VAT paid, and the seller, who will remit the VAT collected to the government. Third, in areas known to be subject to large abuses, blanket rules could be created to flag offending expenses. For example, meals and entertainment expenses could be specifically excluded from eligibility for a VAT credit. VATs paid to restaurants and to sporting event ticket vendors would thus be ignored

<sup>49</sup>This result is similar to the essentially nondeductible treatment of unreimbursed employee business expenses under the current income tax because of their treatment as miscellaneous itemized deductions, which subjects them to the limitations of deductibility only to the extent that they exceed 2 percent of adjusted gross income. Section 67(b).

automatically when determining a taxpayer's VAT credits. Alternatively, if a partial VAT credit were to be allowed for these expenses, the VAT credit could be partially allowed and the expenses could be made readily identifiable.

In theory, e-VAT could adopt the same disallowance of personal expense rules that now exist under the income tax. Even if those rules were adopted, taxpayer compliance with the rules should increase dramatically under e-VAT, because of the automatic tracking built into this system. Thus, under e-VAT, the taxing authority could more easily identify personal expenses, like a vacation trip to Paris purchased by a taxpayer for which he claimed a VAT credit, because each expense would appear as a separate item in the taxing authority's database. As such, taxpayers could not exaggerate the amount of the VAT paid for personal expenses, like this trip to Paris. Although whether the trip had a business connection would still have to be identified on audit, at least the scope of the taxing authority's inquiry would be significantly narrowed.

It is also likely that taxpayers would be much more reluctant to cheat because of the greater ease with which the taxing authority could establish both error and intention on the part of a taxpayer erroneously claiming a VAT credit. For example, the taxing authority could easily identify all taxpayer credits claimed for club dues (for which no income tax deduction is currently allowed), because the identification number of the club, which would be the seller in the transaction, would attach to the transaction giving rise to the VAT credit in question.

Some personal expenditures would remain difficult to police. Suppose that special clothing expenses are paid for by a business for its employee, which the business regards as a business expense rather than compensation to the employee. Under the income tax, policing of that expense involves examining it among a list of many other items claimed by the employer as business expenses. Under e-VAT, the credit for the VAT paid on the clothing would involve examining VAT credits that could be coded for clothing (and other items identified as areas involving potential abuse). Precoding of VATs by type of expenditure should make an auditor's job substantially easier than under the income tax. Issues like these may still need to be examined on audit, and just as under any other consumption or income tax system, discovery would still require a vigilant taxing authority to audit the taxpayer. Nevertheless, the audit process would likely be more efficient under e-VAT because the taxing authority would have available a database under an electronically collected VAT.

Adoption of e-VAT may present an opportune time to bring new order to the personal-business distinction. Adoption of this system may be a good time to codify objective rules for determining which expenses are viewed as inherently personal. For example, e-VAT could deny VAT credits for all entertainment expenses, all commuting expenses, all clothing expenses (other than uniforms paid for by the employer), and some other expenses common to all working individuals. These are the most common areas of abuse, which generally involve small amounts in individual cases but large amounts in the aggregate. Broad rules denying VAT

credits for these items would make detection under e-VAT easy and could allow for lower tax rates on the broader base than would otherwise be possible.

A similar approach of nondeductibility could be adopted under the current income tax, as has been done in other developed countries, such as the United Kingdom. As of yet, however, Congress has not chosen to do that. Instead, it has, over a span of more than 40 years, enacted and amended various complicated special limitations, leaving what most people would see as clear abuses largely untouched. The most significant limitation was enacted in 1986 — and amended in 1988 — to limit most food and entertainment expense deductions to 50 percent of the amount expended. This limitation has reduced abuse but increased the complexity of the income tax system. In contrast, e-VAT, as a new system, could simply disallow a VAT credit for these personal expenses, an action that would thereby eliminate the abuse.

#### D. Control of Systemic Tax Cheating

VAT proponents contend that a credit VAT in the United States would be more secure than alternative forms of taxation, like the income tax, because a credit VAT, like e-VAT, is not nearly as susceptible to cheating. Income tax proponents disagree and respond with the "conventional wisdom" that the British experience with the VAT leaks about 15 percent of its tax revenue because of cheating,<sup>50</sup> a figure that is roughly equivalent to the estimated tax cheating losses for the U.S. income tax.<sup>51</sup> Does this apparent equivalence mean that e-VAT will neither improve the level of tax compliance nor reduce the tax gap? I do not think so.

First, the most obvious form of VAT cheating involves the fictitious payee. A taxpayer concocts a fictitious purchase and related VAT payment made to a non-existent seller and claims a VAT credit for the VAT that was never actually paid. Electronic tracing under e-VAT largely eliminates this problem. If there is no reported sale, there is no reported purchase in the database. If the taxpayer claims that the purchase was made in cash, it will easily be identifiable by the taxing authority and will be ripe for audit and disallowance.

Second, much of the VAT cheating in Britain and other parts of the EU traces to two aspects of the European VAT that either would not apply in the U.S. economy or

<sup>50</sup>See HM Revenue & Customs, "Measuring Tax Gaps 2009," at 11 (2009), available at <http://www.hmrc.gov.uk/freedom/tax-gap-estimates.htm> (describing the tax gap in the United Kingdom as ranging between 11.8 percent and 15.7 percent of VAT revenue between 2002 and 2009); see also Reckon, LLP, "Study to Quantify and Analyse the VAT Gap in the EU — 25 Member States," Sept. 21, 2009, at 46, available at [http://ec.europa.eu/taxation\\_customs/resources/documents/taxation/tax\\_cooperation/combating\\_tax\\_fraud/reckon\\_report\\_sep2009.pdf](http://ec.europa.eu/taxation_customs/resources/documents/taxation/tax_cooperation/combating_tax_fraud/reckon_report_sep2009.pdf) (reporting the results of a study commissioned by the European Commission that estimated the VAT gap in the United Kingdom to be 17 percent in 2006).

<sup>51</sup>See Joel Slemrod, "Cheating Ourselves: The Economics of Tax Evasion," 21 *J. Econ. Persp.* 25, 31, 33 (2007) (estimating that noncompliance with the U.S. income tax is about 17 percent of actual revenue).

would be controllable with the electronically collected method proposed for e-VAT. The first aspect is that in Europe, VAT cheating occurs largely because the European-style VAT is destination-based, even within the EU. Thus, goods that move across borders within the EU are zero-rated; that is, they are not subject to VAT on import. Consequently, the destination country of the import can collect the entire VAT on the product as the product moves up the chain — from importer to wholesaler to retailer, all the way up to customer — because the importer will not get a VAT credit for the VAT not collected on the import transaction.

The second aspect of the European VAT that engenders cheating is that a VAT is not payable by the merchant collecting it until many months after the transaction.<sup>52</sup> This combination of zero-rated imports and delayed VAT remittance has given rise to a fraudulent technique known as the “missing trader” scam. Under the scam, a buyer claims a VAT credit for a transaction in which the seller never remitted the VAT collected.<sup>53</sup> This scam and its variations account for the bulk of the EU’s VAT compliance losses.<sup>54</sup>

An example will help illustrate how the scam works. An importer, referred to as Trader, imports goods — say, cellphones<sup>55</sup> — for which the exporter does not collect a VAT, because the European VATs are destination-based. Trader immediately resells the cellphones to Wholesaler, who pays the price of the phones plus a VAT, let’s say in the amount of €20. Wholesaler knows that the VAT paid will be a credit against the VAT that he owes when he resells the phones to Retailer. Trader, who collected the VAT from Wholesaler, disappears, or goes missing, ergo becomes a missing trader without ever having remitted the VAT to the government. Wholesaler claims the VAT credit of €20, thereby reducing his VAT liability by that amount. Trader’s failure to remit the VAT payment, however, is not a sine qua non for Wholesaler obtaining a VAT credit. If Wholesaler can prove that the VAT payment was made, Wholesaler will be entitled to the VAT credit. The net result is that the government fails to collect the €20 from the missing trader. The government thus forever loses a major share of the VAT on the imported product, because the missing trader never makes the remittance of the VAT that it collected from

Wholesaler. Meanwhile, Wholesaler is entitled to the credit, thereby precluding the government from recouping the VAT from him.

The missing trader scam presents a problem for government collection regardless of whether Wholesaler is an intentional or unwitting part of the scam. The ultimate sale of the product carries with it the full VAT. If Wholesaler is part of the scam, which the government may suspect, Wholesaler will share in the absconded VAT with the missing trader. If Wholesaler is not part of the scam, he may still have benefited from the scam by being able to purchase the imported cellphones in effect at a cheaper price. Either way, Wholesaler’s profits will be augmented by the unremitted VAT collected by the missing trader.

There are several variations of the missing trader scam. One is known as “the carousel.” In the carousel, Wholesaler is an exporter whose sales abroad will not be subject to the VAT, which is destination-based. Nevertheless, it can claim a credit for the VAT that it paid to Trader, and if it has no domestic sales, a refund of the VAT paid to Trader. The result is that Wholesaler, an exporter, is claiming a refund of VAT that Trader has never remitted to the government. Thus, the government is out of pocket the amount equal to the VAT collected from Wholesaler by Trader as a result of a transaction in which the home country has had no more involvement than merely being a place where the goods have come to rest momentarily. The VAT scam simply involved shipping the goods in and out of the country, perhaps in a single day. In the carousel, it does not matter what the goods are, because the only effect of the transaction is to generate a VAT credit to Wholesaler, which is refunded by the government.

However, the carousel comes with the drawback of requiring Wholesaler to request a refund, alerting the government to a potential scam. To protect against this, scammers have developed a variation of the carousel known as “contra-trading,” which avoids the need for a refund claim. Under contra-trading, an actual VAT-paying business steps in as the wholesaler. It buys the goods from Trader at a bargain price and can use the VAT collected by Trader to offset the VAT that would otherwise need to be remitted by Wholesaler on its sales. This thus eliminates the need for a refund request and reduces the risk of alerting the government to the scam. This ploy comes close to the income tax shelters involving “purchasing” artificially generated losses to offset income or gain.

Importantly, these are effective scams against the government because of the zero-rating of the imported goods in the EU and the lack of timely collection of the VAT from the missing trader. However, neither of these conditions would exist under e-VAT. In particular, the zero-rating condition would not be present in a U.S. credit VAT system, and the timely collection condition would not exist under e-VAT.

Sales of goods that pass between U.S. states are not zero-rated, unlike sales of goods among EU member countries. This is because a U.S. VAT would be a national federal tax system. Thus, only imports (from outside the United States) would be zero-rated. Imports into the United States, unlike imports in the EU from other

<sup>52</sup>“A Tax Net Full of Holes,” *The Economist*, May 13, 2006, at 87. (“Trade data have to be passed to a trader’s national tax authority only after three months and the taxman has another three months to hand them on to his counterparts across the EU.”)

<sup>53</sup>See Richard T. Ainsworth, “Carousel Fraud in the EU: A Digital VAT Solution,” *Tax Notes Int’l*, May 16, 2006, p. 443, *Doc 2006-7105*, or *2006 WTD 86-7*.

<sup>54</sup>See Andrea Gebauer et al., “Can Reform Models of Value Added Taxation Stop the VAT Evasion and Revenue Shortfalls in the EU?” *10 J. Econ. Pol’y Reform* 1 (2007).

<sup>55</sup>This is the example used by Ainsworth that is based on an actual case in Britain, *Fresh ‘N’ Clean*. See Richard T. Ainsworth, “Tackling VAT Fraud: Car Flipping and Computer Chips on a Carousel,” *Tax Notes Int’l*, Apr. 16, 2007, p. 267, *Doc 2007-8574*, or *2007 WTD 76-8*.



member countries, would be subject to U.S. Customs, which would facilitate tax collection and tracking of importers who go missing. Moreover, importers could be required to be certified, which would avoid missing traders.

However, the more important distinction between e-VAT and the EU VAT is that e-VAT ensures immediate tax collection because it is automatic and electronic. Under e-VAT, a missing trader could never collect tax and skip town. As a result, e-VAT could do for the VAT what withholding has done for the income tax — namely, ensure immediate tax payment, instead of allowing taxpayers to wait until the end of the year to pay their taxes. Indeed, e-VAT would extend even further than the current withholding system: E-VAT would allow the government to reap the benefits of withholding in every transaction while income tax withholding applies to only a fraction of income-generating transactions.

Thus, on balance, VAT proponents are correct that compliance will be a lesser problem in a U.S. credit VAT system than it has been in the current income tax. This conclusion is bolstered by the fact that under e-VAT, one should expect that the compliance problems would be largely eliminated for credit or other electronic transactions.

### E. International Consistency

Virtually the entire industrialized world, with the exception of the United States, uses a credit-method VAT. Some countries have chosen to have multiple rates for varying products, a complicating feature requiring classification decisions for products with few differences. For instance, in the United Kingdom, the VAT rate for cooked chicken differs from the VAT rate for only partially cooked chicken that can be purchased for takeout to be fully cooked at a later time. Because administrative efficiency is a major goal of e-VAT and requiring judgment calls in the selling process would impede that efficiency, e-VAT uses a single VAT rate. Some VAT systems allow an exemption from the collection process for small businesses. Under e-VAT's automatic and electronic collection system, no such exemption is necessary or desirable.

Finally, most countries employing a credit VAT — 110 countries at last count — have chosen to use a destination-based tax. Under a destination-based VAT, the VAT is imposed on imports in their destination country, but not on exports, which can be sold free of VAT. An origin-based VAT, in contrast, would impose the tax on exports but not on imports. E-VAT uses the destination-based system as well and thus is in step with other VAT regimes.

E-VAT's destination-based choice would correct the competitive price disadvantage in Europe — as well as other VAT-collecting jurisdictions — that U.S. exports now suffer against those VAT-collecting jurisdictions' manufactured goods. This competitive disadvantage results from the fact that U.S. goods incur and thus absorb and include in their prices the U.S. corporate income tax imposed on the U.S. producers as well as the VAT owed when the importer sells the U.S. goods in those VAT destinations. Under destination-based e-VAT, as a replacement for the corporate tax, U.S. export goods would

not be subjected to the competitive price disadvantage of having to include in their prices a U.S. corporate tax on top of the destination-based foreign VAT.

Economists insist — and with compelling logic — that any such competitive disadvantage would be offset by adjustments in currency exchange rates. Businesspeople, however, do not believe this, and U.S. trade and export tax policy has attempted to deal with their concerns. Any competitive disadvantage suffered now by U.S. exporters would disappear under e-VAT, which would replace the U.S. corporate income tax with a U.S. destination-based VAT.

### F. Financial Institutions

Payments to banks or other financial institutions for savings or investment purposes should of course be exempt from the VAT and should not be subject to automatic payment by the financial institution to a government tax collection account. To accomplish this exclusion, financial institutions would register to obtain a VAT exemption identification number, so that savings account deposits and other savings transfers would be coded as exempt savings deposits. This mechanism should not create a problem. Indeed, the exemption would assist in uncovering and identifying foreign bank accounts of U.S. persons, because foreign financial institutions would also have to register to obtain a VAT exemption and an exemption identification number.

This mechanism would be largely self-enforcing. That is because a foreign financial institution's failure to register as VAT-exempt or otherwise disclose that it was a foreign financial institution would trigger an automatic VAT payment to the government when the saver transferred funds to the institution. Thus, this mechanism would ensure that all financial institutions register to qualify for VAT exemption. This identification could then lead the taxing authority to audit, if deemed appropriate, any purchases or other expenditures made by the U.S. person out of the account at the foreign financial institution to determine whether the purchase was subject to uncollected U.S. VAT.

However, not all payments to financial institutions like banks and insurance companies are simply exempt flows of capital intended for savings purposes. Some payments may very well be for services such as, in the case of a bank, maintaining a cost-free checking account, facilitating and making online payments to merchants on behalf of depositors, collecting checks transferred to a bank for collection, and providing free ATM services. For a life insurance company, the services would include the assumption of the risk of an insured's early death as a component of a cash value life insurance policy. These amounts that are paid for services should not be exempted from the VAT. Often savings and payment for services are bundled together, making it difficult to separate the services portion and subjecting only that portion to tax.

The obvious solution is to require financial institutions to unbundle the services portion and charge a VAT on that portion by requiring all transfers to the institution to be coded as partially exempt and partially taxable under the VAT. However, that may prove mechanically difficult as a practical matter, and a percentage allocation rule

might have to be adopted to perform that function. In the case of a bank, the taxable portion would presumably be determined by the spread between what the depositor earns on the deposits and what the bank earns when it lends that money in the ordinary course of its business. That spread reflects the bank's business gross profit, offset by the products and services it purchases from other businesses, for which a VAT credit would be allowed. This is the type of solution that Hall and Rabushka favored in their flat tax. The unbundling problem for life insurance companies would be easier because of the existence of term life insurance contracts, which would establish a market price for mortality risk assumption.

### G. Sales Tax as a Comparison

A national sales tax, like a VAT, lends itself to electronic collection. This section, however, advocates a credit-style VAT over a retail sales tax, because a VAT collects tax at all stages of production and is thus less easily evaded than a retail sales tax. Further, a VAT facilitates a second-level wage tax, as explained earlier, which can build progressivity into the tax system.

### H. State Taxes

Most states collect their own taxes through either an income tax or a sales tax, or both. VAT opponents have suggested that adoption of a federal VAT to replace the federal income tax would make taxing income at the state level substantially more difficult, perhaps impossible as a practical matter, and would crowd out states' ability to raise revenue through sales taxes.

Dissuading states from relying on state income taxes, however, represents an extra benefit of eliminating the federal income tax and moving to e-VAT: One would expect elimination of the state income taxes with the end of the federal income tax.

If states decided to replace their state income taxes with state e-VATs, the state tax could be added onto the federal e-VAT and collected by the federal taxing authority and remitted to the states. This would allow both federal and state VAT payments and credits to be handled in a single procedure. However, in the case of a state e-VAT, the added complication of VAT collected in one state and wages paid to employees who reside in another state would have to be dealt with by the states, hopefully in a uniform manner. In contrast, if states wanted to use a sales tax in addition to or instead of a state e-VAT, any state could of course do so. Appending a state retail sales tax to a federal e-VAT should be relatively easy.

### I. Transition Considerations

There are many transition issues that come with replacing the current income tax with a consumption tax as the exclusive means of raising revenue. They would exist regardless of whether the consumption tax takes the form of a sales tax, a VAT, e-VAT, the Hall-Rabushka flat tax, or a cash flow consumed income tax. The most important transition problem is the loss of existing wealth or purchasing power. However, an in-depth discussion of this important question is outside the scope of this report and is the subject of another published article

by this author.<sup>56</sup> As a result, this portion of the report will focus on other transition issues.

Hall and Rabushka, in their two-tier consumption tax proposal, identified several transition issues that would need to be confronted, particularly in simplifying the individual wage-earner portion of the tax. First and foremost was the treatment of home mortgage interest. Under a VAT, either a credit method as under e-VAT or a subtraction method as under the Hall-Rabushka flat tax, interest income is not includible in the tax base. Correspondingly, interest expense is not deductible under a subtraction VAT, nor does it give rise to a VAT credit under a credit-style VAT. Similarly, interest expense does not give rise to a deduction for wage earners in their wage tax component. This change would represent a windfall to creditors and a disaster to debtors. This would especially be the case in which the debtor is a homeowner because of the size of the home mortgage interest deduction allowed for many homeowners relative to their income and other assets.

Hall and Rabushka contend that once the rules for their proposed consumption tax were fully phased in, equilibrium home mortgage interest would adjust downward to compensate for the nonincludability to creditors and nondeductibility to debtors. But what of the pre-existing mortgages that carry the higher, previous market interest rates? For those, Hall and Rabushka offered debtors and creditors a choice: They could leave the mortgage terms intact and be taxed under the old inclusion/deduction rules, or they could agree to a reduced interest rate and have the interest be nonincludable/nondeductible.<sup>57</sup> The same transition choice would work for e-VAT.

Hall and Rabushka have suggested some other transition rules and posed other transition choices.<sup>58</sup> These are all relevant to e-VAT as well. Importantly, the automatic and electronic collection attribute of e-VAT would not add to the difficulties of transition. Indeed, it could help speed up the development — and facilitate improvement — of existing technology to track and report electronic transactions.

### J. Special Circumstances

The system described in this report appears simple, straightforward, secure, and relatively inexpensive to administer for everyday sales of goods and payment for services. Interpretative questions and unusual situations will arise, however, as they do under other VAT systems used around the world, and the body of learning and experience that has evolved over many years and many

<sup>56</sup>For an in-depth discussion of these transition issues, see Daniel S. Goldberg, "The Aches and Pains of Transition to a Consumption Tax: Can We Get There From Here?" 26 *Va. Tax Rev.* 447 (2007).

<sup>57</sup>Hall and Rabushka, *supra* note 14, at 73-75.

<sup>58</sup>See also Robert E. Hall and Alvin Rabushka, "Putting the Flat Tax Into Action," in Robert E. Hall et al., *Fairness and Efficiency in the Flat Tax*, 3 (1996); Hall and Rabushka, *Low Tax, Simple Tax, Flat Tax*, 68 (1983).

places can be drawn on to deal with them.<sup>59</sup> Importantly, under e-VAT, any problems that will arise can be dealt with and implemented at the business taxpayer level, which is the focus of e-VAT and in which complexity is most appropriately addressed.

Special circumstances, however, may require some modifications to the general procedures. This section will discuss some of these circumstances next.

**1. Used property.** Under the theory of e-VAT, the sale of used property, except financial assets, would be subject to tax. Ordinarily, however, tangible property — such as used automobiles and household appliances — is unlikely to increase in value, so imposing a tax on the sale of those items would double-tax them because a tax was already paid when the items were originally purchased by the seller. Thus, under a VAT system such as e-VAT, a credit would be allowed for tax previously paid on used property that is later resold. The credit, which would be nonrefundable, would usually obviate the need for collecting an additional tax at the point of sale. Under a credit-style VAT, the credit would theoretically be available, although, as a practical matter, consumers who sell used property would not likely have procedures established to make easy use of it.

However, in some circumstances, used property does appreciate in value. An example is previously owned artwork, which can continue to appreciate regardless of its previous ownership. To avoid double taxation or cascading of tax, a credit would be allowed for the tax previously paid by the seller, which would offset some, but not all, of the VAT due on the later sale of the used property that had appreciated in value.

Collection of the tax on the sale of used property would not be as easy as tax collection from taxpayers engaged in the business of retail sales. Because electronic transactions would be the norm for retail sellers and intermediate goods producers, the mechanism for collecting the VAT would be automatic and inexpensive. In contrast, for casual sellers, substantial payments would eventually also be electronic, but the automatic imposition of a VAT on the gross amount would require a claim to be made for a credit in the amount of the VAT previously paid. It may be that retrieval of records of the VAT previously paid would be required and would involve some difficulty, even though the original sale was logged in a database. A decision would have to be made regarding whether to forgo collection of the VAT on the casual sale of used property. A decision to forgo tax collection in that case could be justified, because casual sales of property are not commonplace occurrences. In the alternative, the mechanics of the process could be solved for some kinds of property. For example, property such as automobiles could be subjected to federal tax on registration in the same manner that automobiles are now subjected to state sales tax.

Finally, the availability of the credit may need to be sacrificed to achieve a simpler system. Arguably, in the interests of simplification, casual resales should not be

<sup>59</sup>See Alan Schenk and Oliver Oldman, *Value Added Tax: A Comparative Approach*, 111-179 (2007).

subjected to tax. The benefits from simplification would have to be weighed against the possibility of complete avoidance of the VAT (presumably, only on the value added by the immediate seller) by retail sellers that sell indirectly to customers through intermediaries acting in the guise of a purchaser and a casual seller.

For instance, there is a scam in the United Kingdom known as “car flipping.”<sup>60</sup> In the United Kingdom, used property is not subject to a VAT. In one iteration of that scam, an importer purchases a car and equips it with handicap controls at a relatively modest cost before selling it to a middleman. A car with those fittings is exempt from the VAT. The middleman removes the handicap fittings and resells the car as “used” for VAT purposes, making the car free of the VAT. Can this type of transaction be discovered? Of course it can; that is, if the revenue authorities are looking for it. However, the major goal of e-VAT is to avoid that type of administrative vigilance and oversight. Consequently, e-VAT could be implemented by taxing resales and allowing a credit for previously paid tax, the records for which should be available electronically. Alternatively, the extra burden of cascading (VAT without credit for previously paid tax) might have to be endured by the casual reseller. The decision about which method should be used can await the adoption of e-VAT.

**2. Personal residences.** The e-VAT proposal could impose a tax on the purchaser of a primary residence. This tax, if required to be paid at closing, however, would substantially increase a buyer’s cash needs at closing. Accordingly, e-VAT could allow the purchaser to elect to pay the tax over 30 years, with interest.<sup>61</sup> This treatment of primary residences would differ from that of the purchase of other residences used for consumption, for which VAT would be due on purchase, but which could be financed privately.<sup>62</sup> If the taxpayer elects to defer payment of the tax for the primary residence, the full amount would become due on resale of the home.<sup>63</sup>

If the resale of the house is subject to VAT, then, consistent with an attempt to avoid cascading, the seller of the house should be permitted a credit for the tax

<sup>60</sup>See Ainsworth, *supra* note 53.

<sup>61</sup>This was the solution chosen under the national retail sales tax that was proposed several years ago by Reps. Dan Schaefer and Billy Tauzin in the National Retail Sales Tax Act of 1996, H.R. 3039, 104th Cong. (1996). The national sales tax proposal is explored in great detail in David R. Burton and Dan R. Mastromarco, *Emancipating America from the Income Tax — How the National Sales Tax Would Work* (1997), available at <http://www.cato.org/pubs/pas/pa-272es.html> (hereinafter Burton and Mastromarco No. 1). See also Burton and Mastromarco, “The National Sales Tax: Moving Beyond the Idea,” *Tax Notes*, May 27, 1996, p. 1237, *Doc 96-15679*, or 96 *TNT* 104-88 (hereinafter Burton and Mastromarco No. 2). Burton and Mastromarco provide a specific method regarding how the national sales tax would operate in practice. The cited section of this article describes their suggestion of how the tax would be implemented.

<sup>62</sup>This is consistent with the national sales tax proposal. Burton and Mastromarco No. 1, *supra* note 61, at 17-18.

<sup>63</sup>*Id.* at 18.



previously paid by him.<sup>64</sup> The transaction would be recorded in county land records, so verification of the allowable credit should not be difficult.<sup>65</sup>

Alternatively, previously owned houses can be treated as used property and not subjected to VAT on resale. The government would forgo tax on the appreciation of the house. This system would then favor previously owned houses, which can be purchased free of VAT, to newly constructed houses, which are subject to VAT.

Finally, all house sales could be subject to VAT, but rather than allowing the seller to use a VAT credit for the VAT previously paid on his purchase of the house, the homeowner who purchases a replacement home could be permitted to apply the amount of tax previously paid on his first house as a credit against the tax due on his second house.<sup>66</sup>

Consistency would suggest that the VAT credit should be allowed on the sale of the house, like a normal VAT transaction, rather than applied to the VAT on the replacement house.<sup>67</sup>

In any event, because of the size of the transaction and its importance to the participants as well as the usual participation of financial intermediaries, the automatic electronic payment of the applicable tax would not create a significant additional administrative burden.<sup>68</sup>

**3. Barter transactions and the underground economy.** Barter transactions and the underground economy have posed significant problems under the income tax system.<sup>69</sup> Barter takes place without any cash being transferred and therefore readily avoids detection by tax revenue authorities. It is particularly troublesome when services are used as payment, because the entire value of the property or services received in exchange for other services, which would ordinarily be included in income, can escape taxation. Similarly, transactions in the underground economy escape taxation because cash is used, enabling these transactions to avoid detection. Both types of transactions present similar problems for a system that taxes transactions at the point of sale, and both must be addressed under the e-VAT proposal.

However, the magnitude of the problem will likely be less, both with barter transactions and with the underground economy. First, one would expect that the tax rate imposed on business sales under e-VAT would be lower than the tax rate imposed under the current, steeply progressive income tax on a high-bracket seller. As such, the amount of revenue lost to evasion would also be smaller.

Second, the loss of revenue is most serious when the property or services on both sides of the barter transactions are ultimately used for consumption. To the extent that one side of the barter transaction is in the production process, the purchaser of that side will not be entitled to a credit for any VAT paid, so the tax-free acquisition of services will ultimately be taxed on resale of the finished product. While a similar situation occurs under the income tax, in that the business taxpayer is not entitled to a deduction for bartered services, taxpayers may in effect obtain a deduction to the extent of their basis in the transferred property, particularly if the transferred property is reflected as cost of goods sold as it is no longer in inventory. Further, under the income tax, there is no assurance that both sides of the barter transaction will be reported consistently, that is, there is no assurance that the failure to report a receipt in income will be offset by the inability of the other side to report a deduction. In contrast, under e-VAT, the failure to report the transaction entirely would automatically affect both sides of the exchange in a consistent manner.

Third, to the extent that barter transactions require policing, there will be more resources available to do the policing under e-VAT because of the significant savings from eliminating the income tax system.<sup>70</sup> Whereas unreported income would continue to be a problem under the income tax system, it can be reduced substantially under e-VAT.

As for the underground economy in which sales take place using cash, e-VAT should fare better than the current income tax, which fails to collect tax on these sales. The replacement of currency transactions with electronic transactions over time will significantly reduce the loss of tax revenues from the underground economy under e-VAT. To the extent that substantial amounts of money pass in the underground economy, the money must be transferred electronically and the tax will be assessed automatically. The remaining loss of revenue under the proposed system should be minor compared to the current income tax. There is a necessary caveat here: To the extent there is expanded use of true "e-money" (a form of privately issued electronic currency<sup>71</sup>), the accountability to the government of transactions that use e-money may become doubtful.<sup>72</sup> If this is permitted to occur, keeping track of these transactions in a manner sufficient to ensure proper collection of a point-of-sale tax may become correspondingly more troublesome. This situation would mirror the difficulties that the central

<sup>64</sup>*Id.*

<sup>65</sup>State real property law would continue to apply to real estate transactions.

<sup>66</sup>Burton and Mastromarco No. 1, *supra* note 61, at 18-19.

<sup>67</sup>As described in note 65, the current real property recording system would be used to maintain records for the credits, similar to other encumbrances on property, which are also recorded in land records. See Burton and Mastromarco No. 1, *id.* at 18-19.

<sup>68</sup>See Burton and Mastromarco No. 2, *supra* note 61, at 1239.

<sup>69</sup>See Burgess J.W. Raby and William L. Raby, "Barter Transactions and the Tax Collector," *Tax Notes*, Nov. 24, 1997, p. 949, *Doc 97-31718*, or *97 TNT 224-49*.

<sup>70</sup>Since the cost of administering a point-of-sale tax would be significantly less than the current tax system, see Goldberg, "Currency-Free Economy," *supra* note 22, at 52 and nn.310-314, resources would be freed up to address the issue of policing barter transactions.

<sup>71</sup>In other words, e-money arises from third-party promises in the form of Internet accounts whose balances have no counterpart in any deposits at a financial institution. *Id.* at 8 and nn.32-33.

<sup>72</sup>True e-money could be developed to protect the anonymity of its owner and to prevent traceability. This anonymous e-money would also make the owner's identity unavailable for purposes of attaching tax liability. *Id.* at 8-10 and nn.34-47.

bank money regulators would likely encounter if they sought to monitor the money supply and to protect users of e-money — as well as others affected by it — from potential financial meltdown in the event of a failure of one or more issuers.<sup>73</sup>

However, at least for transactions that are not illegal, presumably major issuers of e-money will be generally known.<sup>74</sup> Otherwise, the e-money would not be widely accepted.<sup>75</sup> Thus, the taxing authorities should be able to identify e-money issuers and force compliance with e-VAT's requirement of reporting and collection of tax, at least from domestic issuers.

It is hard to discuss and resolve potential tax problems involving e-money at this point, however, because e-money is currently more hypothetical than real. As a result, it is extremely difficult to foresee with any precision how regulators will hold issuers of e-money accountable. Once issues around e-money become clearer, there likely will be a way to ensure that e-money transactions are traceable by taxing authorities.

**4. Gifts.** Cash gifts that are made electronically because they pass through the banking system become traceable and taxable under e-VAT. If gifts were excluded from the transaction tax base as well as from the gift tax (for example, because they were within the annual exclusion amount), they would have to be specially identified at the time of the transfer to avoid the automatic assessment under e-VAT. Unlike gifts under the current tax system, there would be a trail because of the required identification of the transfer as a gift. That would facilitate taxation of wealth transfers if the amounts are large as well as audits if the government desired verification.

#### IV. Conclusion

E-VAT differs from the previously proposed two-tier taxes — the Hall-Rabushka flat tax and Bradford's X-Tax — in that it uses a credit-method VAT instead of a subtraction VAT. It also explicitly integrates the estate and gift taxes. However, in almost all respects, e-VAT will not alter the macroeconomic conclusions of Hall, Rabushka, and Bradford regarding the shift to these consumption taxes, aside from the greater ease of border adjustments inherent in a credit VAT over a subtraction VAT.<sup>76</sup>

In contrast to the flat tax and X-Tax, e-VAT is a transaction tax and thus facilitates point-of-sale collection. It permits greater progressivity than a straight

<sup>73</sup>*Id.* at 61 and nn.330-331. If a central bank, such as the Federal Reserve Bank, would be unable to trace the path of e-money, it follows that tax collection would experience the same difficulties using similar technology.

<sup>74</sup>See Elinor Harris Solomon, *Virtual Money*, 74-75 (1997).

<sup>75</sup>*Id.*

<sup>76</sup>Charles E. McLure Jr., "State and Local Implications of a Federal Value-Added Tax," *Tax Notes*, Mar. 28, 1988, p. 1517; see also Frederick J. Bradshaw IV, "Tax Relief and the Competitiveness of U.S. Exporters," *Tax Notes*, Oct. 7, 2002, p. 129, *Doc 2002-22624*, or *2002 TNT 195-90* (explaining that indirect taxes, like the credit-invoice VAT, are eligible for border tax adjustments under the current international trade regime while direct taxes, like the subtraction VAT, are not).

business-level VAT, because the separate wage tax component of the tax allows for flexibility in tax rates, exemptions, and deductions. Although this characteristic might appear to be a simple detail without a significant conceptual difference, the characteristic of taxing transactions and dispensing with annual accounting would in fact make an enormous practical difference. It would facilitate electronic collection and auditing to ensure compliance. This characteristic should thereby reduce costs of compliance after initial start-up expenses of programming, and it should significantly reduce the tax gap.

E-VAT takes advantage of computer technology that will only improve as the 21st century progresses and the economy continues to shift away from cash transactions to electronic transactions, including debit cards, credit cards, and EFTs. These methods of payment have become not only commonplace, but also dominant in commerce. Accordingly, the time has come for a change in the tax system.

Benjamin Franklin said after the U.S. Constitution was drafted: "You have a republic, gentlemen, if you can keep it." The same caution holds with the adoption of e-VAT. Congress should avoid making special taxing rules or rates for different businesses or commodities. There is no opportunity in e-VAT for tax expenditures at the business level if all business-level tax rates and rules are kept uniform. In any event, e-VAT does not lend itself well to tax expenditures at the business level, and that is a good thing; it is a feature, not a bug, in the system.

The same might not be said for the wage tax part of e-VAT, because the legal incidence of that portion of the tax is shifted to the wage earner. That part, therefore, lends itself to legislative enactments of a home mortgage interest deduction, deduction for state taxes, deduction for charitable contributions, and so forth. Although nothing is foolproof, starting over with a new tax is more likely to produce a better result than trying to fix an existing mess, just as preventing a food fight from starting in a school cafeteria is easier than stopping one that has already erupted.

Also, e-VAT allows for progressivity, comparable to the income tax, because it recognizes political reality, as do many other proponents of consumption taxes, at least at the low wage end. One would hope that e-VAT would have only two tax levels: a zero level for low-wage earners and another level for all other wage earners. Moreover, e-VAT importantly limits the effect of progressivity to wages; it does not subject investment income to tax. Progressivity is best evaluated by taking spending decisions as well as taxing decisions into account. Under this analysis, one could effectuate wealth redistribution on the spending side by providing public services, such as quality schools and healthcare, free or at subsidized costs.

Finally, e-VAT provides the prospect of a return-free tax system for individuals if tax expenditure deductions can be avoided. That prospect might even prompt Congress to replace tax expenditures with direct government expenditures, which would make the fiscal system more transparent and eliminate the need for the tax expenditure budget.

## V. Appendix A: Tax-Inclusive vs. Tax-Exclusive Rate

### A. Tax-Inclusive Versus Tax-Exclusive

The examples used in this section assume a 20 percent tax-inclusive rate. This means that the money used to pay the tax will be subject to tax. Thus, a tax-inclusive sales tax rate of 20 percent on a \$100 sale means that the sale price of \$100 generates a sales tax of \$20, which must be paid out of the \$100 sales proceeds. Similarly, a tax-inclusive VAT rate must be paid out of the proceeds as well.

Unlike the above illustration, the typical state sales tax is set at a tax-exclusive rate. This means that a sale for \$80 subject to a tax-exclusive rate of 25 percent generates a tax liability of \$20, but the liability is added to the transaction price, so that the seller charges and the buyer pays the \$20 liability in addition to the \$80 sales price and thus pays a total of \$100. Importantly, the concept of the tax — whether a sales tax, a subtraction-method VAT, a credit-method VAT, or a flat tax — is the same regardless of whether the tax rate is expressed as tax inclusive or tax exclusive. Indeed, there is an algebraic relationship<sup>77</sup> between a tax-exclusive rate and a tax-inclusive rate that can be seen by using a simple example. A tax-exclusive rate of 25 percent is equivalent to a tax-inclusive rate of 20 percent. A sale for \$80 subject to a tax-exclusive 25 percent sales tax rate generates \$20 in tax liability, or 20 percent of the \$100 combined sales proceeds and sales tax amount. This consequence is the same as the seller selling the product for \$100 subject to a 20 percent tax-inclusive sales tax, which also generates \$20 (\$100 x 20 percent) of sales tax. The same principles hold true with VATs and the flat tax.

The subtraction-method VAT and the flat tax are generally discussed and illustrated using a tax-inclusive tax rate, presumably because of the manner in which those methods would be collected, which is similar to the current income tax's use of a tax-inclusive tax rate (a taxpayer is taxed on the income used to pay the income tax liability). In contrast, a sales tax and a credit invoice VAT are generally discussed and illustrated using a tax-exclusive tax rate, although in practice these methods do not have to use a tax-exclusive rate. Yet, as explained and illustrated above, the two methods represent different ways of describing the same tax and can easily be compared.

Thus, one can combine a 20 percent tax-inclusive credit invoice VAT with a 20 percent wage tax, as the e-VAT proposed in this report would do, with the consequence that the seller's tax liability is reduced by virtue of the credit he gets for wages paid by exactly the amount of the employee's wage tax liability. For example, under the foregoing simple rate structure, a \$10 wage paid would generate a credit for the employer of \$2 (\$10 x 20 percent).

<sup>77</sup>Tax-inclusive rates can be converted into tax-exclusive rates by the following formula:

$$r_e = r_i / (1 - r_i)$$

Conversely, tax-exclusive rates can be converted into tax-inclusive rates by the following formula:

$$r_i = r_e / (1 + r_e)$$

However, if one wanted to use a tax-exclusive credit invoice VAT computed using a 25 percent tax-exclusive tax rate and a wage tax computed using a 20 percent tax-inclusive tax rate, the sale price would be set at \$80, generating a VAT of \$20 and a total transaction payment of \$100. The employee's wage tax would be \$2 (\$10 x 20 percent), and the employer's credit would be based on the employer's tax liability computation using the employer's equivalent tax-inclusive rate applied to the wages. Further, even if the wage tax were more complicated and allowed a zero-rate amount and deductions as under the proposed e-VAT, the credit would still be determined based on the employer's tax-inclusive VAT rate applied to the wages, despite the actual tax paid by the wage earner.

### B. Apples and Oranges

The difference between tax-inclusive taxes, such as the present income tax, and tax-exclusive taxes, such as state sales taxes, has caused substantial confusion at the grass-roots level in tax policy debates. As explained above, the difference lies entirely in how the tax rate is expressed and whether the proponent of the tax prefers the lower tax-inclusive rate to the higher tax-exclusive rate, and whether the proponent wants the tax to be less transparent to the consumer (including it as part of the price) or more transparent to the consumer (collecting it as an add-on to the listed price).

Proponents of retaining the income tax often compare the income tax rates to what VAT or sales tax rates would have to be to raise the same amount of revenue. As explained above, this comparison between taxes using tax-inclusive rates and those using tax-exclusive rates leads to substantial confusion and can be unfair and misleading.

### C. Gross-Up

The connector between a tax-inclusive tax rate and a tax-exclusive tax rate is the tax lawyer's concept of gross-up. Gross-up issues most often arise in the employment context, in which gross-up means including the tax payment withheld from or credited to the employee in the employee's wage income. As such, the withheld tax payment would both be included in the amount subject to tax and be a payment of the resulting tax liability. For example, consider the common arrangement under which an employee is subject to a tax of \$2 on a wage earned by him, but the employer withheld the \$2 and paid it to the government in discharge of the employee's tax liability. The \$2 withheld tax amount would be treated as if the employer paid \$2 to the employee who discharged his own tax liability; that is, the \$2 tax would be included in the employee's wage income and taxed as such, even though the employee did not actually receive the money directly.<sup>78</sup>

The means by which the concept of gross-up connects the two methods of expressing the tax rate is best explained by following the previous example. As discussed earlier, a tax-inclusive tax rate of 20 percent is equivalent to a tax-exclusive rate of 25 percent. So if a

<sup>78</sup>See *Old Colony Trust Co. v. Commissioner*, 279 U.S. 716 (1929).



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wage earner subject to a tax-inclusive rate of 20 percent is paid \$10 out of which he must satisfy his own tax liability, he would pay \$2 in tax and retain \$8. But if the employer withheld the \$2 and paid it to the government, a 20 percent tax rate applied only to the employee's \$8 take-home pay would yield only \$1.60 of tax liability and thereby fall short of assessing the desired amount of tax, entitling the employee to a refund. Instead, the \$2 withholding must be included as wages, causing wages to total \$10 and the tax at 20 percent to be \$2. This inclusion is referred to as gross-up.

Note that the \$2 tax amount in the example above would result if the take-home wage amount of \$8 (which does not include the tax itself) were taxed at a tax-exclusive rate of 25 percent and there were no gross-up. In other words, a tax-exclusive tax rate of 25 percent applied only to the take-home \$8 and not the withheld \$2 would yield the same tax amount as a tax-inclusive wage tax rate of 20 percent including a gross-up. Thus, a grossed-up tax-inclusive tax is equivalent to a not grossed-up tax-exclusive tax. The gross-up in a tax-inclusive system ensures that the tax is tax-inclusive and cannot be made tax-exclusive for the recipient by simply avoiding the receipt of a direct payment.

If the tax rate structure were varied by including a zero-rate amount and graduated rates, the algebra and numerical examples demonstrating the foregoing relationships become more complicated.<sup>79</sup> Nevertheless, the essential concept of the relationship explained above would remain the same.

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<sup>79</sup>*Id.*